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May 2000

MONTHLY LABOR REVIEW

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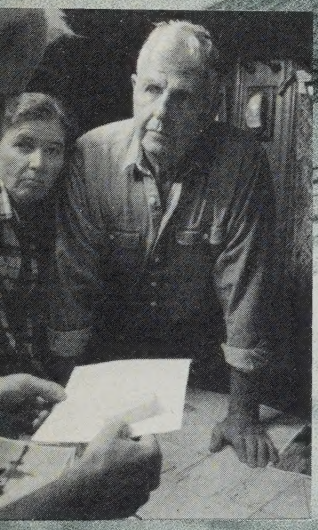

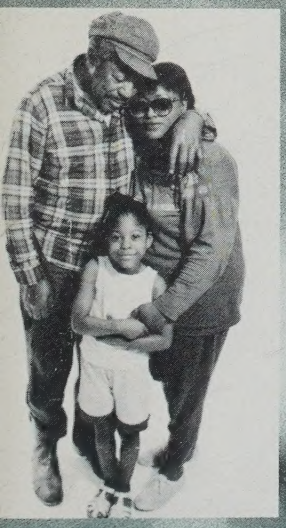

Spending patterns:

Older Americans

Families on assistance

Purchasers of meals away from home

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The May *Review*

From their very beginning before the turn of the 20th century, Bureau of Labor Statistics consumer expenditure surveys have been primarily regarded as a source of weighting schemes for price or cost indexes of one sort or another. One of the first such surveys actually conceived of consumer spending as a cost of production. The data collected in these surveys have, however, always provided useful insights into consumer behavior as well. This issue present three such analyses.

Geoffrey D. Paulin investigates the increasingly important role of older consumers. Older Americans are projected to become a larger share of the population, and the average real spending of older families has been growing at a much faster rate than that of families headed by a person younger than 65. Paulin's regressions investigate the degree of homogeneity of older consumers' spending patterns and the degree to which those patterns may be changing over time.

Lucilla Tan reports on the demographic characteristics and expenditure patterns of families receiving public assistance. Almost 14 percent of noninstitutional civilian households receive at least one of the following: supplementary security income (SSI), welfare, medicaid, food stamps, a housing subsidy, or public housing. Not unexpectedly, basic needs such as food, clothing, and shelter account for a significantly larger share of the assisted households' expenditures.

Geoffrey D. Paulin returns to analyze consumers' spending on eating out—"food away from home" in the Bureau's more prosaic wording. Just slightly fewer than three-quarters of "consumer units" (our fanciful phrase for families) reported eating out at restaurants, carryouts, fast-food stores, or other eating establishments during the average week. Household spending on meals away from the house was about $1,477 over the course of a year, nearly a third of total spending on food.

Lost-time injuries

A total of slightly more than 1.7 million injuries and illnesses that required recuperation away from work beyond the day of the incident were reported in selected private industry workplaces during 1998. The total number of these cases has declined in each year since 1992.

Men accounted for 2 out of 3 of the 1.7 million cases in 1998, a proportion somewhat higher than their share (59 percent) of the hours worked by all private wage and salary workers. Workers aged 24 and under accounted for 15 percent of the cases and 14 percent of the total hours worked by all private wage and salary workers. Workers aged 25 to 44 accounted for 56 percent of the cases and 55 percent of the hours worked. Workers aged 45 and older accounted for 27 percent of the cases and 30 percent of the hours worked. For more information, see "Lost-worktime Injuries and Illnesses: Characteristics and Resulting Time Away from Work, 1998," news release USDL 00–115.

College degrees in industry

In 1998, 39 percent of workers in the services industry held at least a bachelor's degree, the highest percentage of all the industries. Close behind the services industry were finance, insurance, and real estate and government (public administration)—in both of these industries, 37 percent of workers had attained a bachelor's degree or higher.

The percentage of workers with at least a bachelor's degree was below 15 percent in three industries. In wholesale and retail trade, 14 percent of workers were college graduates and in agriculture, forestry, and fishing, 13 percent were. In construction, just 10 percent of workers held a bachelor's degree or higher. Find out more about characteristics of industries in *Career Guide to Industries, 2000–2001 Edition*, BLS Bulletin 2523.

Workplace homicide

There were 709 job-related homicides in 1998, a 34-percent decline from 1994. During the 7-year history of the Census of Fatal Occupational Injuries, the highest number of job-related homicides—1,080—occurred in 1994. The number of work-related homicides has declined in each year since then. The biggest 1-year decline in homicides—a decrease of 18 percent—took place between 1997 and 1998.

While many may assume that most work-related homicides are crimes of passion or anger, committed by disgruntled coworkers, spouses, or acquaintances, this is not the case. Of the 428 homicide cases in 1998 where the victim-perpetrator association could be identified, fully two-thirds involved robbery. Coworkers and former coworkers accounted for 15 percent of identifiable cases of workplace homicide, acquaintances for 7 percent, and relatives for 4 percent. Thus, these three categories taken together accounted for barely a quarter of the total. For further informatin, see "Work-related Homicides: The Facts," by Eric F. Sygnatur and Guy A. Toscano, *Compensation and Working Conditions*, Spring 2000.

Pay premiums up the ranks

The wage differentials between adjacent levels of the supervisory hierarchy provide an interesting insight: The differential increases as the level of supervision goes up. First-line supervisors, on average, earn 13 percent more than team leaders. Second-line managers earn 59 percent more than first-line, and third-line managers earn 73 percent more than second-line.

The small differential between team leaders and first-line supervisors is best explained by looking at their occupations. Team leaders are often found in professional occupations, which tend to be higher paying. On the other hand, there are a large number of first-line supervisors in service occupations, which tend to be lower paying. See James Smith, "Supervisory Duties and the National Compensation Survey," *Compensation and Working Conditions*, Spring 2000. □

Expenditure patterns of older Americans, 1984–97

Older consumers, who are expected to account for an increasing share of expenditures, do not differ significantly from younger consumers in their spending patterns; the underlying tastes and preferences of subgroups of older consumers did not change significantly over the study period

Geoffrey D. Paulin

One of the major demographic changes affecting the United States today is the increasing average age of the population. This trend is expected to continue for the next several years, especially as the large segment of the population known as the baby-boomers continues to mature. The oldest members of this group (born in 1945) will reach the nominal retirement age (65 years) in 2010. As this happens, consumer spending patterns are likely to change in a number of ways.

But what kinds of changes are in the offing, and how large might they be? Have there already been changes that might help us prepare for the future? Although previous studies offer some insight by recognizing and examining the importance of expenditures by older consumers, many of those studies concentrate on spending patterns at just one or two points in time. This article includes elements from earlier studies, but takes the analysis further: first, expenditure trends are analyzed for different age groups within the older population; second, experiments are designed to test whether tastes and preferences differ over time for older consumers. Data for the analysis are provided by Consumer Expenditure Surveys from 1984 to 1997.

Methods and procedures

Previous studies. Beth Harrison[1] compared consumer units (hereafter, families)[2] in which the reference person was between the ages of 65 and 74 with those in which the reference person was 75 or older.[3] Despite the brevity of her analysis, Harrison described an important finding: persons 65 years and older are not homogeneous. She found that the older group had fewer earners than the younger group (0.2, compared with 0.6), was less likely to own its home (2 out of 3 families 75 and older, compared with 3 out of 4 aged 65 to 74), and had a slightly smaller family size (1.5 members, compared with 1.9 members.) She also found that those 75 or older spent less for most goods and services than those 65 to 74.

A later study by Thomas Moehrle examined expenditure patterns by families with reference persons aged 62 to 74.[4] Moehrle classified families into three income categories (less than $15,000, $15,000 to $29,999, and $30,000 or more), which he then further divided into two groups each: working and nonworking. Working families were those whose reference person received earnings from full- or part-time employment during the 12 months prior to the interview. All other families he classified as nonworking, even if members other than the reference person had worked. Those whose reference person was involuntarily unemployed or working without pay were excluded from the sample. Moehrle found that, regardless of income class, workers had higher expenditures for most goods and services than nonworkers.

Pamela B. Hitschler presented comparisons

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both within age groups across time and across age groups at a point in time.[5] One expenditure component that yielded interesting outcomes in the comparisons was health care: chart 1 of her article showed that, regardless of age (65 to 74 years or 75 and older), the proportion of the health care budget allocated to insurance was substantially larger in 1990 than in 1980. Correspondingly, the proportion allocated to medical services declined noticeably for each group over time. The same chart revealed that, regardless of year, the younger group (aged 65 to 74) allocated a larger share of total health care dollars to health insurance, although the gap was less in 1990 (48 percent, compared with 45 percent for the 75-or-older group) than in 1980 (37 percent, compared with 26 percent).

More recently, Mohamed Abdel-Ghany and Deanna L. Sharpe used Tobit analysis to examine levels of expenditures for those same two age groups.[6] Tobit analysis allowed them to make estimates about how tastes and preferences differed between the groups when characteristics such as income, family size, and region of residence were held constant. Abdel-Ghany and Sharpe found differences between the two groups in every expenditure category they examined.

Similarly, Rose M. Rubin and Michael L. Nieswiadomy[7] combined results of several studies, some also using Tobit, into a book describing characteristics and expenditure patterns of older consumers. One of their more interesting extensions to the earlier analyses was that they attempted to measure the effects of change on the lives of older consumers, first by comparing regression results for pre- and postretirement families[8] and then by examining changes in tastes and preferences over time.[9] Their final chapter, entitled "Trends and the Future," briefly discusses how the increasing number of older people may affect households, businesses, and government policies in the future.

The current article incorporates themes from all of these studies and yet is different from them in many ways. Starting with the similarities, all use data from the Interview component of the Consumer Expenditure Surveys. Further, with the exception of Moehrle's investigation, all use data for families whose reference person is either between the ages of 65 and 74 or 75 and older. Like them, the current study uses similar methods (for example, Tobit regressions) to examine expenditure patterns, and many of the same expenditures (such as food, housing, and health care) are considered.

However, there are differences. For instance, the Abdel-Ghany and Sharpe models are expanded to include variables such as whether the reference person is working. (Moehrle used this variable as well.) Also, the Tobit regressions are used here not to compare 65- through 74-year-olds with those aged 75 and older, but to compare whether tastes and preferences for each group are changing across time. Although Rubin and Nieswiadomy have also done this to some extent, the models employed in this article include more independent variables. In addition, models are designed to show specifically which expenditure–characteristic relationships have changed significantly over time, as opposed to the Chow test used by Rubin and Nieswiadomy, which can only tell whether, in general, there has been some kind of change over time. And most important, while, of necessity, the regressions use only the Interview survey, data from the *integrated* survey results (described below) are used as well. Because these data are available on a consistent basis from 1984 onward, the analysis shows trends, so that the reader can observe how changes in patterns have occurred over time. The final set of data is from 1997, because that is the most recent year for which data were available at the time the study was carried out.

The data. There are two components to the Consumer Expenditure Surveys: the Diary and the Interview. Each is designed to collect different types of expenditures with maximum efficiency.

Families participating in the Diary survey receive a booklet in which to record all their expenditures during the 1st week of a 2-week survey period. The booklet is retrieved at the end of the 1st week and replaced with a fresh booklet. When the second booklet is retrieved at the end of the 2nd week, participation in the survey is completed. The Diary survey is designed to collect expenditures for frequently purchased items (for example, groceries) and small-cost items (for instance, laundry detergent).

The Interview survey is a panel survey designed to collect information on family expenditures over five consecutive quarters. During each interview, the respondent is asked to recall expenditures for the last 3 months for most items in the survey. The first interview is used for bounding purposes—that is, to make sure that the expenditures reported took place in the time frame in question. (For example, a family that just purchased a refrigerator the week before the first interview should report the purchase during the first interview. If, during the second interview, the respondent for that same family also reports the purchase of a refrigerator, the interviewer can make sure that the respondent is not referring to the same refrigerator reported in the first interview.) The Interview survey is designed primarily to collect information on recurring (for instance, rent or insurance) and "big-ticket" (for example, automobiles or major appliances) expenditures, because outlays for such items tend to be remembered for long periods. Also used to collect data on travel expenditures not collected in the Diary survey, the Interview survey covers up to 95 percent of all expenditures.[10]

The data from each survey are subsequently integrated using various statistically based techniques to find out which source provides the most reliable information for a given expenditure item. The simplest case is that in which an expenditure item is collected in one survey, but not the other. For

example, in the Diary survey, extremely detailed information on food purchased at the grocery store is collected, with the respondent asked to write down each specific item purchased and the associated expenditure (for example, $5 for chuck roast). However, in the Interview survey, only a global question concerning the average weekly expenditure for groceries during the last 3 months is asked.[11] Therefore, the Diary is the source used to obtain estimates even for aggregated food expenditures (such as for beef, or even the more aggregated category of meat, poultry, fish, and eggs). However, some items, including certain articles of apparel, are collected in both surveys. In these cases, data from each survey are compared, and the source that appears to be better based on the aforementioned statistical analysis is used.[12] The integrated data yield the best overall picture of expenditure patterns for comparing trends in spending.

Unfortunately, because the surveys are separate entities, it is not possible to "integrate" them in any way to perform regression analysis. For this reason, the Interview survey is chosen, because of its comprehensive nature. Although many detailed items for specific goods are collected in the Diary, only the Interview provides an estimate of total expenditures for all families. Hence, it is from the Interview survey results that data are extracted for regression analysis.

Analysis of spending patterns

Trends. As noted earlier, previous studies have analyzed differences in expenditure patterns across age groups, but within a certain period, or have statically compared two periods and looked at the change that has taken place between them. However, either of those types of analyses misses some of the interesting variation in expenditure patterns that occurs between periods. For example, comparing two periods that are separated by a long stretch of time might lead to the conclusion that not much had changed, because expenditures for a particular item were identical in each period, on average. Yet, between the periods, expenditures may have soared and retreated back to original levels, or they may have modulated around a baseline to which they have coincidentally returned in the second period. Although in the ending period, expenditures were similar to those of the starting period, what happens in the middle is lost without trend analysis. Because the integrated data from the Consumer Expenditure Surveys are available in a consistent format from 1984 onward, separate trends can be followed for those aged 64 to 75 and those aged 75 and older.

The first trend to note is the increasing proportion of the population that is accounted for by older families. The percentage of all families whose reference person is 65 or older rose from 19.8 percent in 1984 to 20.8 percent in 1997. Although the increase may not seem large, keep in mind that the numbers are percentages of the population as a whole. Given the growth of the U.S. population, the rise in the percentage of those older than 65 represents an increase of approximately 4.1 million families over the 1984–97 period, or an average increase of more than 313,000 families per year. This magnitude of growth is due mainly to an increase in numbers of the most senior members of the group: although 65- to 74-year-old families account for about 12 percent of the population in both 1984 and 1997, those aged 75 and older increased from less than 8 percent to more than 9 percent of the population during that time. Or, to put it another way, concomitantly with the growth of the total U.S. population during the period, the number of families whose reference person was younger than 65 increased about 16 percent from 1984 to 1997, while the number of those aged 65 and older grew nearly 23 percent. Of the latter, those aged 65 to 74 increased their numbers by 13 percent, while those aged 75 and older grew by 38 percent.

Table 1 shows that, while younger families have had relatively stable expenditure levels in real (that is, adjusted for inflation) dollars from 1984 to 1997, real expenditures (in 1997 dollars) by older consumers have risen substantially—14 percent for those aged 65 to 74 and 18 percent for those aged 75 and older. As a result, spending by older consumers has risen from 12.6 percent to 14.6 percent of all consumer spending. (See chart 1.) Put another way, those 65 and older once accounted for 1 in every 8 consumer dollars spent; now they account for more than 1 in every 7 consumer dollars spent.[13] Of course, this rise in aggregate consumer spending share may reflect the phenomenal growth rate in the stock market during the period in question, given that older consumers are more likely than younger consumers to live on proceeds from selling assets or on dividends and other income that assets produce.

But what are the ramifications for less aggregated expenditures? Surely, if older consumers have different tastes, preferences, or physical needs than younger consumers, they are expected to have differences in expenditure patterns. To test this idea, trends for several major expenditure categories, including food at home, housing (shelter and utilities),[14] apparel, transportation, and recreation (including entertainment, food away from home, and reading) are displayed in real (that is, inflation-adjusted) terms. (See chart 2.) In each of these cases, indeed, older consumers purchase different *amounts* than younger consumers, but in most cases, the *trend* of expenditures is similar for older and younger consumers. One interesting exception is recreation: although all age groups exhibited a real decrease in these expenditures during the 1990–91 recession, in 1997, recreation expenditures of younger consumers were down slightly (about 1 percent) from their 1991 value, whereas they had risen substantially for older consumers by 1997—19 percent for those aged 65 to 74 and 28 percent for those at least 75 years old.

Table 1. Selected characteristics of families, by age group, 1984–97

Item	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	Percent change, 1984–97
Number of households (thousands):															
Under age 65	72,357	72,919	74,727	74,378	75,259	75,496	76,889	77,216	78,256	78,189	80,709	81,330	82,659	83,640	15.6
65 to 74	10,761	11,302	10,832	11,578	11,319	11,848	11,318	11,935	11,959	11,934	12,038	11,933	11,742	12,109	12.5
75 and older	7,105	7,343	8,485	8,194	8,284	8,474	8,761	8,767	9,804	9,926	9,463	9,860	9,811	9,827	38.3
Nominal values															
Income before taxes:[1]															
Under age 65	$25,770	$27,493	$28,036	$30,273	$31,351	$34,447	$35,293	$37,633	$37,465	$38,699	$39,801	$40,878	$42,076	$44,135	71.3
65 to 74	15,720	18,191	17,874	18,598	20,704	22,051	21,501	22,723	23,182	24,468	24,934	25,553	25,824	27,492	74.9
75 and older	11,712	12,306	12,461	12,912	13,707	16,285	15,435	16,247	18,051	17,192	19,616	18,006	18,379	19,425	65.9
Average annual expenditures:															
Under age 65	$23,953	$25,406	$26,113	$26,616	$28,142	$30,190	$30,955	$32,274	$32,423	$33,325	$34,186	$34,949	$36,342	$37,545	56.7
65 to 74	15,842	17,938	17,506	18,888	20,120	21,152	20,901	22,564	22,862	23,706	25,059	25,277	27,739	27,792	75.4
75 and older	11,122	13,012	12,198	12,230	13,339	15,919	15,450	15,782	17,794	18,350	19,280	18,572	19,603	20,279	82.3
Consumer Price Index for All Urban Consumers (1982–84 = 100), annual average	103.9	107.6	109.6	113.6	118.3	124.0	130.7	136.2	140.3	144.5	148.2	152.4	156.9	160.5	54.5
Real values (1997 dollars)															
Income before taxes:[1]															
Under age 65	$39,808	$41,010	$41,056	$42,771	$42,535	$44,587	$43,340	$44,347	$42,859	$42,984	$43,104	$43,051	$43,042	$44,135	10.9
65 to 74	24,284	27,134	26,175	26,276	28,090	28,542	26,403	26,777	26,520	27,177	27,003	26,911	26,417	27,492	13.2
75 and older	18,092	18,356	18,248	18,243	18,597	21,079	18,954	19,146	20,650	19,096	21,244	18,963	18,801	19,425	7.4
Average annual expenditures:[1]															
Under age 65	$37,001	$37,896	$38,240	$37,605	$38,181	$39,076	$38,013	$38,032	$37,091	$37,015	$37,023	$36,807	$37,176	$37,545	1.5
65 to 74	24,472	26,757	25,636	26,686	27,297	27,378	25,666	26,590	26,154	26,331	27,139	26,620	28,375	27,792	13.6
75 and older	17,181	19,409	17,863	17,279	18,097	20,605	18,973	18,598	20,356	20,382	20,880	19,559	20,053	20,279	18.0

[1]Complete income reporters only.

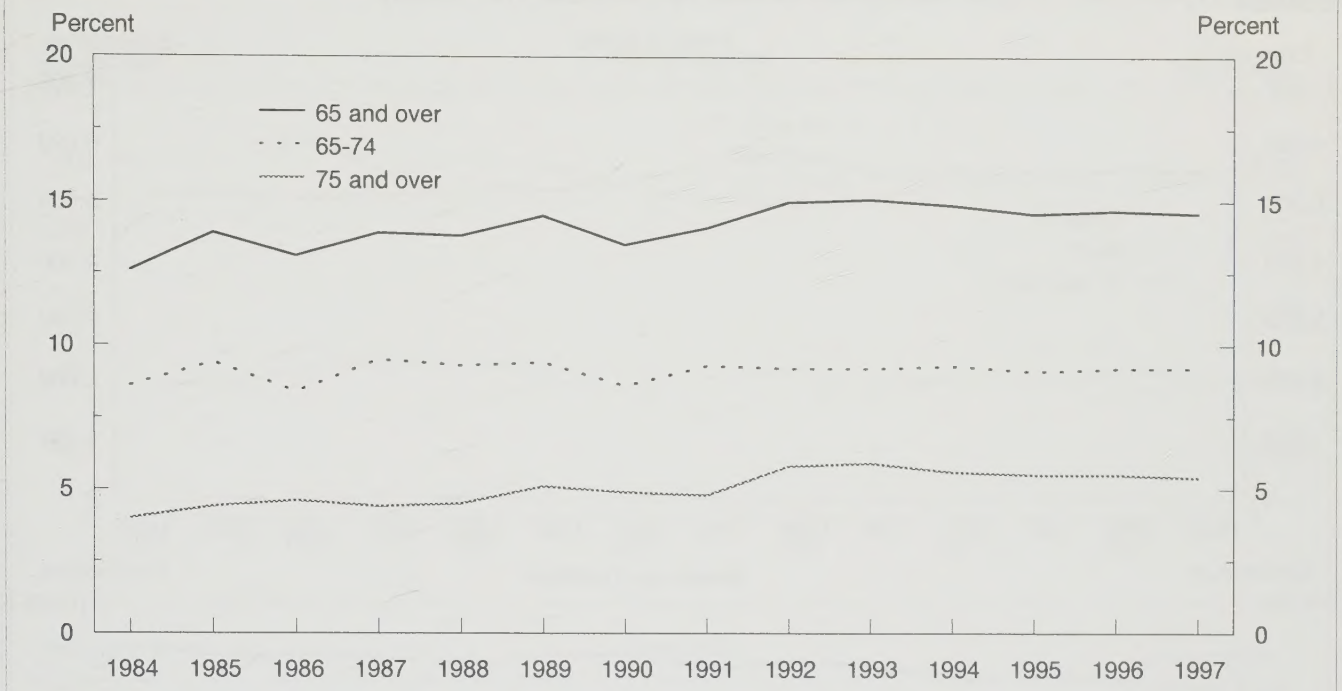
An analysis of shares is also useful in this case. Aggregate shares, or the percentage of total consumer spending on a particular category for which each age group accounts, are especially enlightening, because they provide insight into which sectors are changing with the population. Older consumers are indeed accounting for larger shares of most of the major expenditures. (Only the share for food at home remained relatively stable for all age groups.) This trend is largely attributable to changes in aggregate expenditure shares for those who are 75 and older. For example, in 1984, that group accounted for 5 percent of spending on shelter and utilities, a share that steadily increased to nearly 7 percent in 1993. Although it has since declined to about 6 percent, the overall aggregate share for shelter and utilities for those aged 65 and older rose from about 14 percent to 15 percent from 1984 to 1997.

Similarly, the older group accounted for 2.6 percent of total spending on apparel in 1984, but the share rose to 4.0 percent in 1997. The rise means that consumers who are at least 65 years old have increased their share of spending on apparel from 1 in every 10 dollars to 1 in every 8 dollars.

For those aged 75 and older, the change in transportation shares are identical to the change in apparel shares from 1984-1997. (That is, they rise from 2.6 percent to 4.0 percent over the period.) However, the aggregate expenditure share for those aged 65 to 74 has been fairly stable, ranging from a low of 7.8 percent in 1987 to a high of 9.3 percent in 1988, but usually staying between 8 percent and 9 percent. Therefore, the aggregate share for the combined older groups increased from 10.9 percent to 12.3 percent of total consumer spending on transportation.

Aggregate shares for recreation increased for all older consumers. For those aged 65 to 74, the aggregate share increased from 7.6 percent to 8.7 percent from 1984 to 1997. Again, the increase was even greater for those aged 75 and older, rising from 2.9 percent to 4.5 percent. Altogether, this group's share

Chart 1. Share of total expenditure accounted for by older consumers



rose from 10.6 percent of total recreation spending to 13.2 percent.

However, the question again arises: Are these changes observed because of underlying changes in the demography of the population or because of changing tastes within different age groups? To answer this question, it is useful to analyze budget shares; that is, we seek to answer the question: What proportion of total expenditures does the average consumer unit in a given age group allocate to a given category of expenditures? For food at home, all age groups experienced a decrease of about 1 percent to 2 percent in the size of their budget share. (For those younger than 65, the share dropped from 15 percent to 14 percent; for those 65 and older, the share started at about 11 percent and dropped to 9 percent or 10 percent, depending on which subgroup one is considering.) Similarly, changes in shares for apparel, shelter and utilities, transportation, and recreation were minimal. Hence, because the budget shares did not change much over time, it is possible to attribute changes in aggregate shares to demographic changes, rather than changes in taste, within the age groups.

One category of spending merits special attention: health care. This category is important for several reasons. First, health care expenditures are expected to be positively correlated with age for adults. Second, much work examining various aspects of health care with data from the Consumer Expenditure Survey has been completed. As noted earlier, works by Hitschler, Abdel-Ghany and Sharpe, and Rubin and Nieswiadomy examined health care for older consumers at least to some degree. Abdel-Ghany and Sharpe compared expenditures of those aged 65 to 74 years and those 75 years and older), while both Hitschler, on the one hand, and Rubin and Nieswiadomy, on the other, examined expenditures for each of these age groups at fixed times—1980 and 1990, for example. Gregory Acs and John Sabelhaus examined trends in health care expenditures from 1980 to 1992, although their focus was on nonelderly households "because most of them have private insurance, while elderly households generally receive insurance through medicare coverage."[15]

Health care expenditures[16] have risen substantially for all groups since 1984. In real terms, those younger than 65 spent about 9 percent more in 1997 than they did in 1984. However, those older than 75 spent more than 20 percent more, and those aged 65 to 74 spent in excess of 26 percent more. As shown in chart 3, older consumers routinely account for a much larger share of aggregate consumer spending on health care than their share of the population. For example, in 1997, those 65 years and older, making up only a bit more than one-fifth of the total population, accounted for nearly one-third of total health care expenditures.

But how are health care dollars allocated? Have there been

Chart 2. Expenditures of older consumers for selected services, 1997 dollars

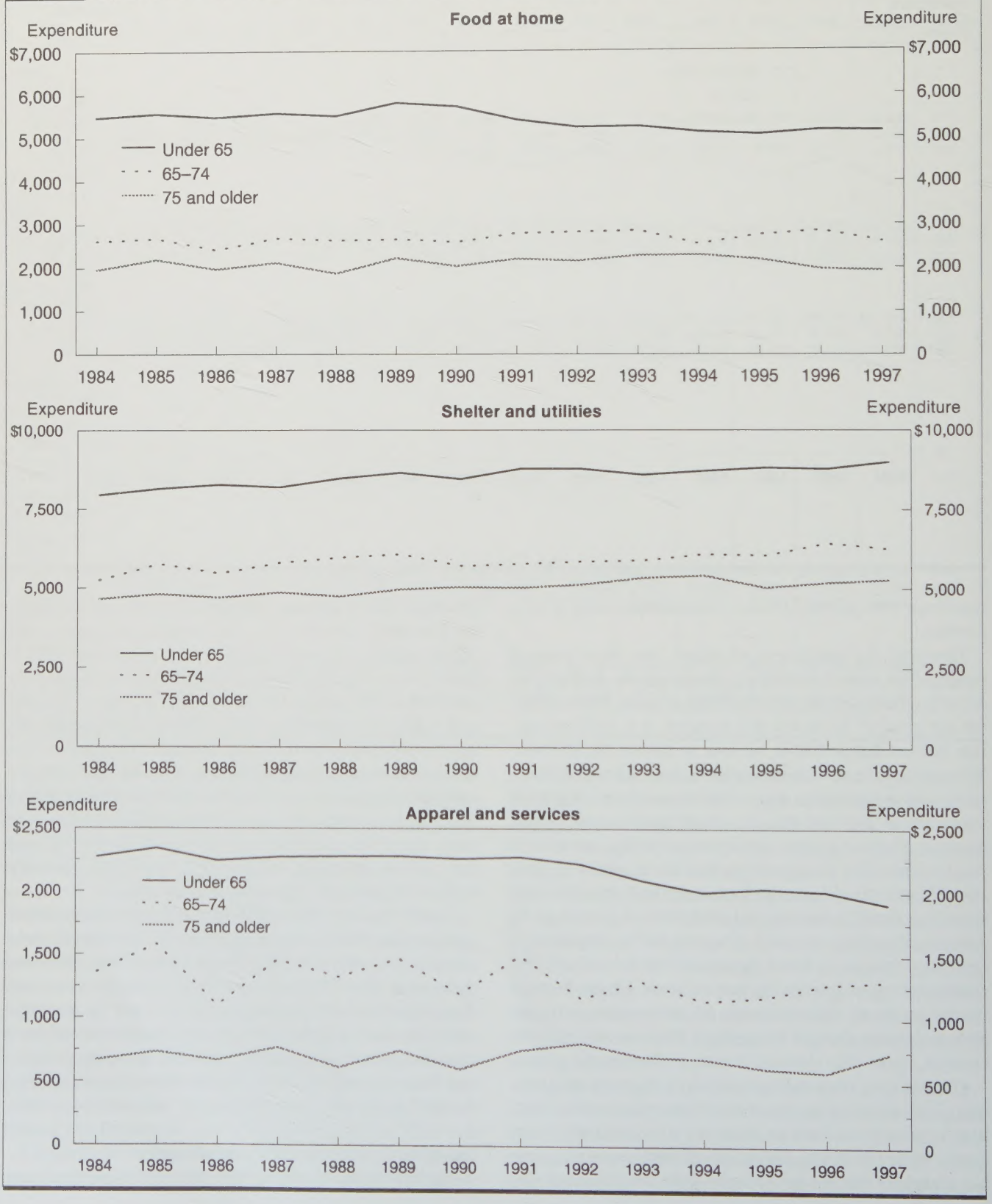
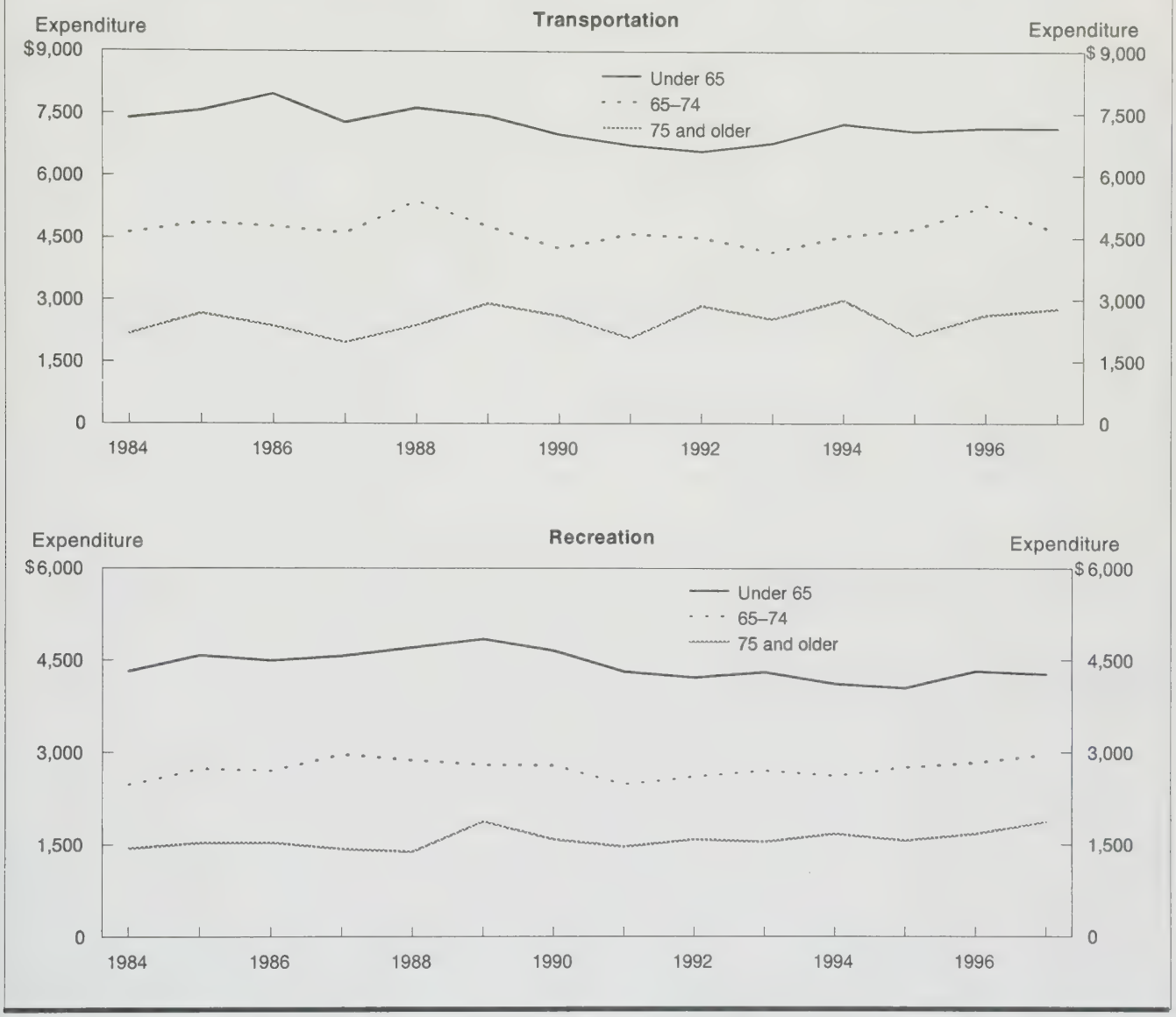


Chart 2. Continued--Expenditures of older consumers for selected services, 1997 dollars



any changes in the way older consumers spend their health care budgets? Shares analysis provides some insight. To start with, health expenditure shares are most volatile for those aged 75 and older. (See chart 4.) For the years 1984 to 1997, as a share of total expenditures, they ranged from a low of 12.7 percent in 1985 to a high of 16.7 percent in 1988. By contrast, for those between the ages of 65 and 74, the share of total expenditures allocated to health care stayed between 8.9 percent (in 1987) and 11.0 percent (in 1993). For those younger than 65, the range was narrowest, from 3.8 percent (from 1985 to 1987) to 4.5 percent (in 1993).

All groups, however, experienced changes in how their health care dollars were spent: a larger share of the health care budget went to health insurance in 1997 than in 1984, regardless of the group considered. (See chart 5.) Although those aged 65 and older consistently allocated a larger share of their health care budget to insurance than those younger than 65, the trend was similar for each group. Those younger than 65 allocated less than one-third of their health care budget (32.8 percent) to health insurance in 1984, compared with nearly half (45.2 percent) in 1997. Those aged 65 to 74 increased their share from 44 percent in 1984 to 53.3 percent in 1997, and the share rose even more for those aged 75 and older, going from 37.9 percent in 1984 to 53.4 percent in 1997.

The increased share for health insurance may explain the concomitant decrease in shares for medical services. (See chart 5.) Again, the two older age groups experienced similar changes in

Chart 3. Share of aggregate health care expenditures and total population for consumers 65 and older, 1984–97

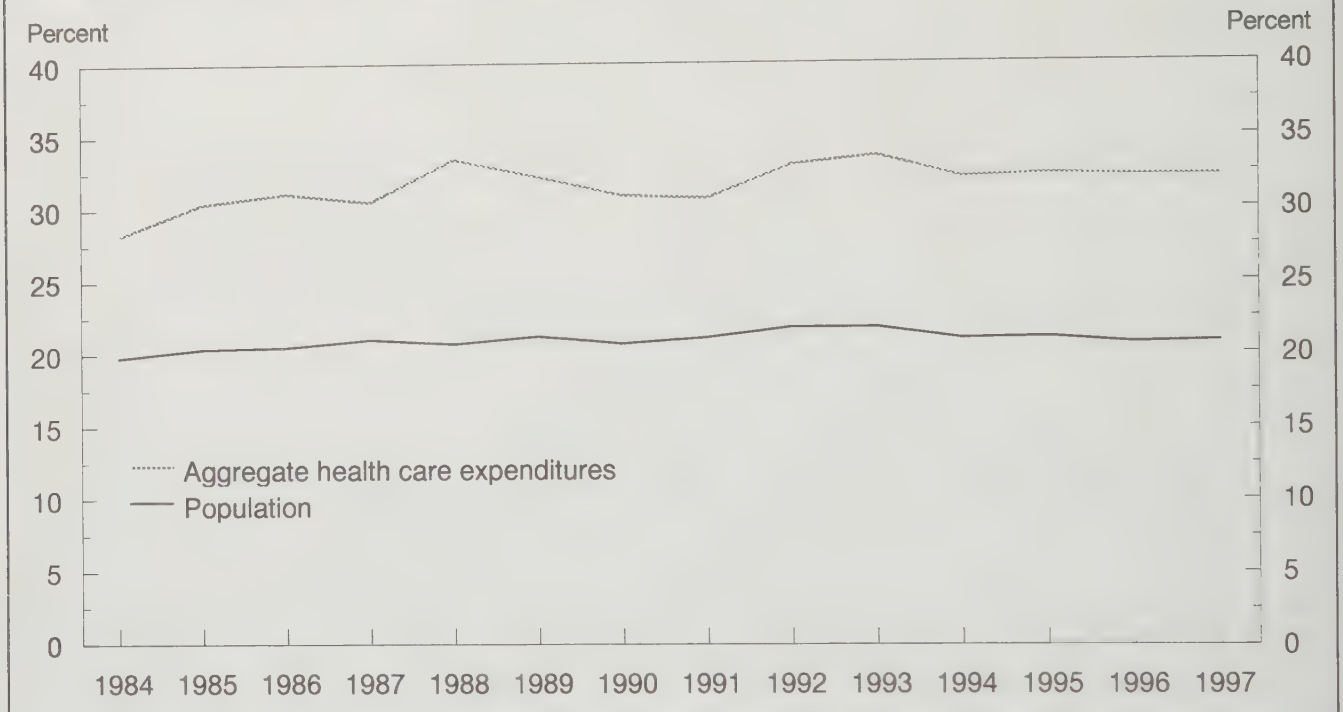


Chart 4. Health care as a share of total expenditures of elderly, 1984–97

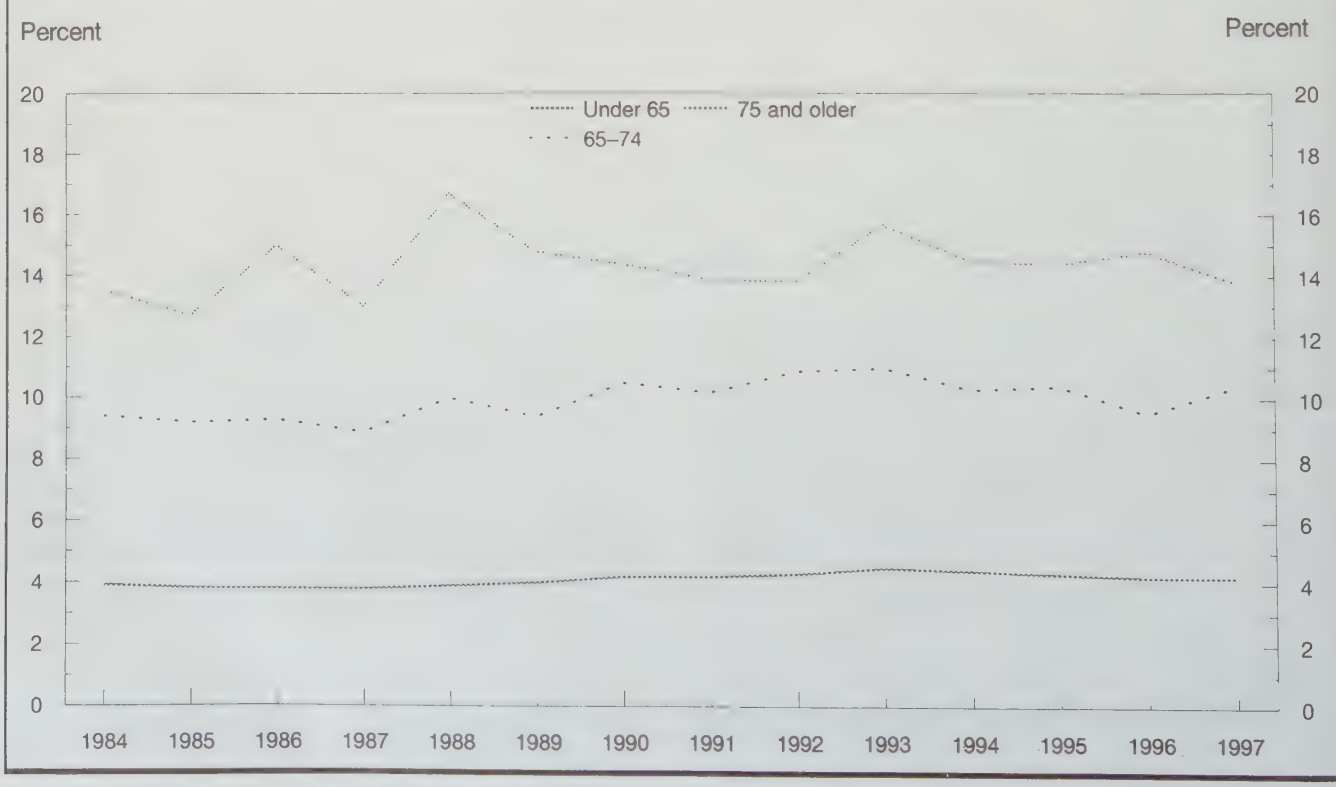
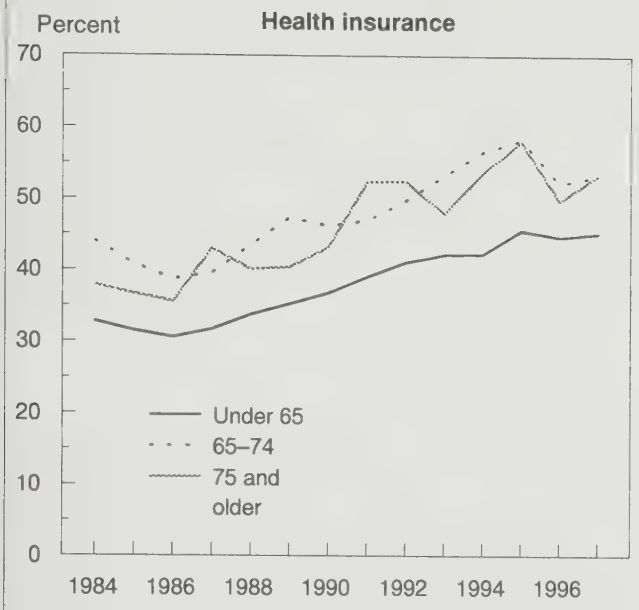
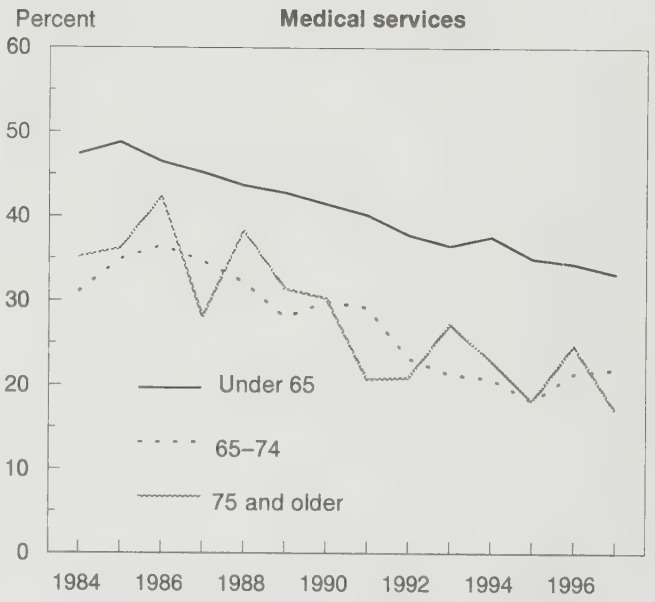
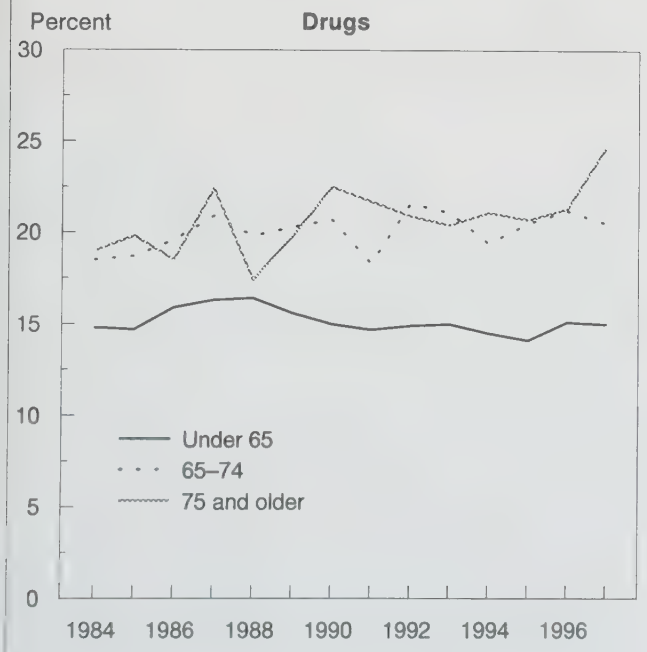
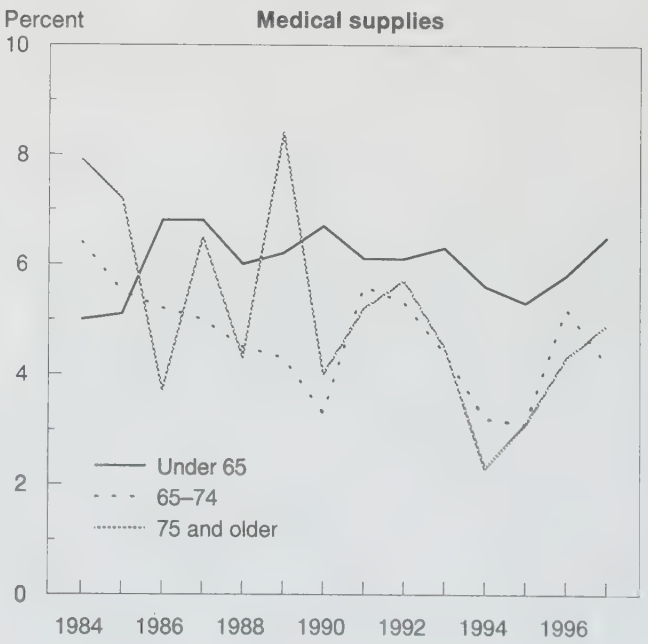


Chart 5. Selected health services as percent of total expenditures for health care, 1984–97









shares, decreasing from about one-third of the health care budget for each in 1984 to slightly more than one-fifth of health care spending (21.9 percent) for those aged 65 to 74 in 1997 and about one-sixth of total health care spending (17.0 percent) for those aged 75 and older. It is interesting to note that for both older groups, the shares are less than those for the group under 65 years old. Health insurance is the only health care expenditure component for which this phenomenon obtains over the entire period examined.

Expenditures for drugs (see chart 5) appear to be trending upward slightly as a share of the health care budget, at least for those aged 65 and older, albeit the shares are more volatile for the 75-and-older group. However, for those younger than 65, the shares are fairly stable, ranging from 14.1 percent of health care expenditures (in 1995) to 16.4 percent (in 1988). Spending on medical supplies is both the smallest and the most volatile expenditure in the health care group, but it appears to be trending downward for older consumers and upward for younger consumers. (See chart 5.)

Regression analysis

Thus far, expenditures and expenditure shares have been analyzed in a general way. However, the results have only demonstrated what patterns may be found in the data, not how or why they occur. For example, if the demographic composition of the age groups has changed in any way (for instance, if average family size or level of income has gone up or down), then those changes may account for changing expenditure patterns. Or if the demographic composition has remained stable, but spending patterns have changed for specific members of any or all of the age groups (such as urban consumers), then those patterns could account for changes in total spending for particular goods and services. Regression analysis allows these issues to be explored.

Several types of analysis are used in this article. First, food at home is analyzed using ordinary least squares. Second, the category of shelter and utilities undergoes two types of analysis: first, a probit model is used to test whether a change in the probability of owning or renting has taken place; and second, the owning and renting groups are separated, and an ordinary least squares regression is run on shelter and utilities for each group. The third set of regressions uses the Tobit method to analyze apparel and services, transportation, recreation and related expenditures, and health care. The large number of families reporting no expenditure for each of these items necessitates the use of Tobit to make certain that the results are not biased toward zero.

Although the results in the previous section are taken from the integrated survey results, the data for the regressions come only from the Interview survey. The reason is that when data are published, it is easy enough to produce the integrated results by taking means where appropriate from Interview and Diary survey sources and summing those means together to form an estimate of the average expenditure for a particular item. However, because the samples for the Interview and Diary surveys are independent, there is no way to combine data for individual families. The Interview survey has a longer recall period (3 months) than the Diary survey (data are collected on a daily basis for a total of 2 weeks) and therefore is less subject to lack of data on infrequently purchased items. As noted earlier, the Interview survey collects up to 95 percent of total expenditures through a combination of detailed questions and global estimates, including data on travel expenditures not collected in the Diary survey. Also, the Interview survey collects information on reimbursements for health care expenditures. For all these reasons, the Interview survey is chosen as the source for analysis.

Variables used. In most cases, the dependent variable for each regression is the amount of the expenditure for one of the major categories already described: food at home, shelter and utilities, apparel and services, transportation, recreation and related expenditures, or health care. The one exception is the probit regression for shelter and utilities. The dependent variable there is a binary variable describing whether the family owns or rents its home; the predicted outcome is the probability of owning the home. The regressions are run separately for each of the two older groups.

The regressions have several independent variables in common as well. (Many of these are also used by Abdel-Ghany and Sharpe, but some changes are made in the current study.) The common variables include total expenditures (as a proxy for permanent income[17]), type of family (single male; husband and wife only; all other families), educational attainment of the reference person (high school graduate; attended college), ethnic origin of the reference person (Hispanic; black), number of earners (one; two; three or more), region of residence (Northeast; Midwest; West), and whether the household is located in a rural area. Other than the variable for total expenditures, these are all binary variables. Most of them are straightforward and are included to control for differences in tastes and preferences among the many types of families in the age groups under study. However, other variables are also included that may require further explanation.

The simplest of these additional variables is a series describing housing tenure (own home with a mortgage; renting). The literature has shown that expenditures can differ by housing tenure.[18] (Of course, the variables signifying homeownership and renter status are excluded from the probit model for predicting housing tenure, given the nature of the dependent variable; also, in the ordinary least squares regression for shelter and utilities expenditures, the samples are already divided into homeowners and renters, so it only makes

sense to include mortgage status in the owner group and to omit the renter variable entirely.) Another additional variable controls for the size of the household when three or more members are present. Why control only for this circumstance? By definition, single-member households include only one person; similarly, families consisting of a husband and wife only include two members. The effects of the size and type of family are therefore encapsulated in one variable, at least for these situations. Other families can consist of two members (such as a grandparent and grandchild) or more. For these cases, the effects of family size and type can be (and are) disentangled. Finally, a series of interaction terms is included to test whether there are changes from 1984 to 1997 in the relationship of the selected expenditures to any of the independent variables, including permanent income.

Model-specific variables. In a few cases, certain variables are of obvious use in predicting a particular type of expenditure, but may not be so important in predicting other expenditures. For example, expenditures on transportation clearly are expected to vary with the number of vehicles owned, but it is not clear whether expenditures for apparel and services do so. Similarly, variables accounting for the number of rooms (including bedrooms), bathrooms, and half bathrooms are included in each of the housing regressions (excluding the probit model, because it is the characteristics of the family, and not the dwelling, that are of interest in that case). Finally, in the model for health care expenditures, variables are included to describe whether or not the family received a reimbursement for any component of health care spending (medical services, prescription drugs, or medical supplies). Reimbursements are treated as negative expenditures for the quarter in which they are received; therefore, they lower total health care expenditures for that quarter. Because the Consumer Expenditure Survey does not collect information on whether reimbursements are expected in the future, it is not possible to include a variable to minimize the effect of potentially large expenditures for health care that will eventually be reimbursed.

Finally, in the ordinary least squares models for shelter and utilities, variables for the number of earners are omitted. The reason is that only in 1997 were there any observations for renters who are at least 75 years old and who have more than one earner. Therefore, the regression would not be able to be run properly, given that it tests for changes over time in the relationship between expenditures and number of earners. Because these variables were not statistically significant (at least not at the 95-percent confidence level) for renters between the ages of 65 and 74 or for owners in either age group, the variables were dropped from the ordinary least squares models in order to keep them consistent.

Price changes. Some caution is needed in the interpretation of these results. Before the regressions are computed, all 1984 expenditures (including the dependent variables and permanent income) are adjusted by the Consumer Price Index (CPI) for all goods and services. This is done to convert the nominal 1984 values into "real" 1997 values. However, not all changes in prices are adjusted. For example, suppose that the price of a specific good drops from 1984 to 1997, and therefore, families purchased more of it during the period. Then the nominal value of the expenditure in 1997 may be higher than, lower than, or the same as it was in 1984, depending on how much the price dropped and how much the quantity purchased increased. However, if the nominal value of the expenditure for the good in 1984 is divided by its price in 1984 and the result is multiplied by the good's price in 1997, then the nominal expenditure in 1997 will be greater than the "real" (that is, price-adjusted) value for 1984 (because the adjustment holds prices constant and the quantity purchased increased). The drawback of this method is that information on the price of the good may not be readily available. However, if a CPI value is available for that specific good, then the 1984 expenditure can be divided by the 1984 CPI for the good and multiplied by its 1997 counterpart. The resulting percent change in the adjusted 1984 expenditure and the observed 1997 expenditure would be the same as calculated by this method or the method of using prices directly. In either case, the 1984 nominal expenditure would be converted to a real 1997 expenditure for the selected good. However, the CPI for all goods and services did not drop from 1984 to 1997; instead, the combined prices of all goods and services rose over that period. Therefore, adjusting the expenditure by the change in the overall CPI will *not* have the same effect as adjusting by the specific good's index! (If a good doubles in price and the quantity purchased falls by less than 50 percent, the nominal expenditure still rises, even though less is purchased.) Then what is the reason for adjusting specific expenditures by the overall price change? First, no indexes are readily available for some of the goods and services that are examined. (The category of recreation and related expenditures is one example.) Second, adjusting by the overall CPI still has the advantage of at least controlling for general price changes. For suppose that, in real terms (that is, adjusting by the overall CPI), the expenditure for a specific item has doubled. Then it can be said with certainty that the average family of interest is allocating twice the purchasing power to the good or service in question that it did in the earlier period. Again, we do not know whether price or quantity changes in the later period account for this increase, but we do know that, in real terms, the expenditure makes up a larger share of the budget in 1997 than it did in 1984.

These results should be kept in mind when one is interpreting such factors as the marginal propensity to consume (MPC)

and the (permanent) income elasticity of the selected expenditures. The conventional interpretation of the MPC is that it represents the fraction of each additional dollar that would be allocated toward the purchase of the good in question, assuming that the family under study received an additional dollar from some source. Implicit in this statement is that increased expenditures are a result of increased quantities purchased. However, in the present case, all that can be said for sure is that if the MPC is found to increase over time, then a larger share of the dollar is being spent on the good or service, but again, it is not clear whether this is because prices increased or whether it is because quantities increased. Similarly, income elasticity is usually interpreted to mean the percent increase (or decrease) in the quantity purchased, given a 1-percent increase in income. However, in the present circumstances, it is interpreted as the percent increase in *expenditure* (in constant 1997 dollars) for the good in question, given a 1-percent increase in income.

Sample issues. Before the regressions are run, families whose total health care expenditures are negative (due to reimbursements) are dropped from the sample. This is done for two reasons. First, if included in the health care model, they would obviously cause a problem when the regression model was computed, because a few expenditures would be negative, several would be zero, and most would be positive. It is not clear how the Tobit model would be specified in such a case. However, as noted earlier, it is at least possible to control for situations in which a reimbursement is received for some component of health care, but is not enough to make the entire health care expenditure negative. Therefore, to keep the sample as consistent as possible for the regressions, those families with negative health care expenditures are dropped from it. Second, in some cases, the reimbursement is so large that total expenditures are actually negative. Because total expenditures are used as a proxy for permanent income in these models, eliminating negative health care expenditures ensures that total expenditures will not be negative.

Similarly, a small percentage of families have no value reported for the number of rooms. Because this situation affects only the housing models, these families are omitted just from that sample.

For 1984, the models include 2,341 observations for the 65- to 74-year-old group and 1,609 for the 75-and-older group. In 1997, there were 2,436 observations for the 65- to 74-year-old group and 2,076 for the 75-and-older group. The models are specified to show how relationships between expenditures and characteristics changed over the period for each group. Within each age group, the data for both years are combined, yielding a total of 4,777 observations for the models that include the 65- to 74-year-old group and 3,685 for those that include the 75-and-older group. (For the housing regressions, the sample is 4,710 for the first age group and 3,652 for the second age group.)

The control group. In analyzing the results of the regression techniques, a control group to which families with differing characteristics can be compared was defined. Conventionally, the control group is designed to represent a "typical" sample point. For example, regardless of the year or age group, the majority of older families studied have no earner present. Therefore, one of the characteristics of the "typical" family is that it has no earners. In some cases, some judgment must be used to decide what represents the "typical" family. For example, regardless of the year, single persons constitute the majority of families who are in the second age group. (See table 2.) However, for the first age group, married couples (with no other members present) are the more typical arrangement, accounting for 3 out of 7 households, regardless of the year. Nevertheless, earlier it was shown how family type and family size interrelate. Using singles as the control group, then, provides a logical base on which to build—a married couple is not only a different family type, but it includes exactly one more person than a single family, so the difference in expenditures due to adding an extra person to the family is subsumed in the coefficient for married couples. Furthermore, because most of the singles are female, by specifying single females as members of the control group, differences in tastes for single men and women can be measured by including a variable to indicate whether the family is composed of a single male.

Accordingly, the control group for each regression is made up of families whose reference person is a single female who is (1) not a high school graduate, (2) neither Hispanic nor black, (3) not an earner, (4) a homeowner with no mortgage (except in the regression for shelter and utilities for renters), and (5) living in an urban area in the South. For the purposes of estimating factors such as income elasticity, families are assumed to have average characteristics for their age group where continuous variables (such as total expenditures or number of rooms) are concerned. The control group applies to each age group and each year. Although such a household may not exist, coefficients for other characteristics are shown so that estimates of expenditures or other factors can be computed for whatever group is examined.

A few words on Tobit. Tobit regression is used when there are a substantial number of nonexpenditures reported (as in this study). In other words, if a family did not purchase an item, then the expenditure on that item is recorded as zero dollars.[19] As pointed out in Abdel-Ghany and Sharpe, including these zeros without some sort of adjustment would yield biased results. In such cases, Tobit is useful because it is a two-stage regression procedure. The first stage predicts the

Table 2. Selected characteristics to accompany regression results

Characteristic	65–to–74 age group		75–and–older age group	
	1984	1997	1984	1997
Sample size	2,341	2,436	1,609	2,076
Homeowners	1,804	1,952	1,096	1,571
Reporting number of rooms	1,765	1,897	1,059	1,507
Missing rooms, bathrooms, or half baths	39	55	37	64
Renters	537	484	513	505
Reporting number of rooms	515	461	495	493
Missing rooms, bathrooms, or half baths	22	23	18	12
Percent reporting expenditures:				
Total (quarterly)	100.0	100.0	100.0	100.0
Food at home	99.6	99.6	99.8	99.8
Shelter and utilities:				
Homeowners (room reporters only)	99.8	100.0	99.8	100.0
Renters (room reporters only)	100.0	100.0	100.0	100.0
Apparel and services	84.5	78.7	70.0	67.3
Transportation	91.4	93.7	72.1	80.6
Recreation and related items	92.0	94.7	84.5	91.5
Health care	96.0	97.8	96.2	98.8
Characteristics (percent)				
Family composition:				
Single man	7.9	9.2	9.6	10.6
Single woman	26.9	27.2	47.3	44.3
Husband and wife only	42.3	41.9	27.7	30.6
Other family	22.9	21.7	15.5	14.5
Three or more members	14.4	14.7	5.9	5.3
Reference person:				
Educational attainment:				
Less than high school	48.2	31.9	63.0	39.4
High school graduate	28.8	32.8	16.8	31.4
Attended college	23.0	35.3	20.3	29.2
Ethnic origin:				
Hispanic	3.3	5.5	2.2	3.2
Black	6.0	9.7	5.8	5.3
White or other	90.7	84.8	92.0	91.5
Number of earners:				
Zero	58.6	58.0	84.2	83.0
One	28.5	28.9	13.0	14.0
Two	10.3	10.4	2.1	2.6
Three or more	3.0	2.3	.7	.4
Mortgage status:				
Has mortgage	17.9	19.2	4.4	8.9
No mortgage (owners only)	59.2	61.0	63.7	66.8
Region of residence:				
Northeast	25.2	22.0	26.3	18.4
Midwest	25.8	28.3	28.7	27.6
South	28.8	31.4	28.2	33.1
West	20.1	18.3	16.8	20.9
Living in rural areas	14.8	11.9	15.1	10.9
Receiving reimbursement for health care	1.9	1.1	1.6	1.0
Average number reported:				
Rooms	5.4	5.7	5.0	5.3
Homeowners	5.9	6.1	5.5	5.8
Renters	3.9	4.1	3.9	3.8
Bathrooms	1.3	1.4	1.2	1.3
Homeowners	1.3	1.5	1.2	1.4
Renters	1.0	1.1	1.0	1.1
Half bathrooms	.2	.3	.2	.2
Homeowners	.3	.4	.2	.3
Renters	(1)	.1	.1	.1
Vehicles	1.5	1.8	.8	1.2

[1] Less than 0.05.

probability of purchase of a given item (using a probit technique), and the second stage predicts how much is spent on the item, assuming that it is in fact purchased. However, Tobit coefficients cannot be interpreted in the same way as ordinary least squares coefficients, because a change in one of the independent variables (say, an increase in permanent income) may influence the outcome not only by increasing the amount of the purchase, but also by influencing the probability of making the purchase in the first place.[20] The proper adjustments are made in each case before calculating MPCs and income elasticities for results from Tobit regressions.

In using regression results to estimate income elasticities, it is necessary to have a value both for expenditures for the good or service under study and for total expenditures (permanent income). The data from the Interview survey are available in a quarterly format. For regression purposes, each quarter is treated independently, although the same family may appear more than once in the sample. Because of the quarterly availability, expenditures in table 3 are quarterly averages for the year in which the consumer unit participated in the interview.[21] For purposes of evaluation, the control group is assumed to have average quarterly expenditures at both the aggregate (that is, total expenditures) and the component (for example, food at home) level. In the Tobit regressions, though, expenditures for specific goods and services (apparel and services, transportation, recreation and related items, and health care) are *not* quarterly averages, but are predicted quarterly expenditures for a member of the reference group. Again, this is because Tobit results require special adjustments before interpretation, and it is necessary to use predicted expenditures to obtain elasticity estimates.

Food at home. At least for those 65 to 74 years old, relationships between characteristics and expenditures appear to have been remarkably stable over time. Although several characteristics have statistically significant parameter esti-

Table 3. Results derived from regression analyses, by age group

Model and category	65–to–74 age group		75–and–older age group	
	1984	1997	1984	1997
Total expenditures (quarterly)	$6,016	$6,513	$3,962	$4,922
Food at home:				
Expenditure	$813	$782	$568	$615
Marginal propensity to consume	[1].030	[1].020	[1].020	[1].016
Income elasticity	.222	.167	.140	.128
Shelter and utilities, owners:				
Expenditure	$1,358	$1,561	$1,150	$1,275
Marginal propensity to consume	[1].072	[1].059	[1].047	[1].065
Income elasticity	.319	.246	.162	.251
Shelter and utilities, renters:				
Expenditure	$1,241	$1,572	$1,221	$1,588
Marginal propensity to consume	[1].094	.081	[1].119	[1].189
Income elasticity	.456	.336	.386	.586
Tobit results				
Apparel and services:				
Expenditure (predicted)	$270	$222	$119	$107
Marginal propensity to consume	[1].023	.018	[1].007	[1].012
Income elasticity	.512	.528	.233	.552
Transportation:				
Expenditure (predicted)	$1,710	$1,511	$438	$587
Marginal propensity to consume	[1].321	[1].240	[1].035	[1].093
Income elasticity	1.129	1.034	.317	.780
Recreation and related items:				
Expenditure (predicted)	$556	$606	$393	$561
Marginal propensity to consume	[1].066	[1].057	[1].031	[1].059
Income elasticity	.714	.613	.313	.518
Health care:				
Expenditure (predicted)	$612	$708	$700	$708
Marginal propensity to consume	[1].028	[1].042	[1].053	[1].020
Income elasticity	.275	.386	.300	.139

[1]Indicates that the coefficient for the marginal propensity to consume is statistically significant at the 95-percent confidence level. For 1984, this means that the marginal propensity to consume is significantly different from zero. For 1997, this means that the marginal propensity to consume is significantly different than it was in 1984.

mates, none of these variables has a statistically significant parameter estimate when interacted with the binary variable which indicates that the data are from 1997 (table 4). In other words, some characteristics, such as type of family and region of residence (at least, the Northeast) appear to have a bearing on food-at-home expenditures for the 65- to 74-year-old group, but these relationships do not appear (at the 95-percent confidence level) to have changed over time. For those 75 and older, however, a few changes are noted. First, families with multiple members appear to have spent less for food at home in 1997 than they did in 1984, as did families in the Midwest. Families with more than one earner, however, appeared to have spent more, as the coefficients for both two-earner and multiple-earner families are statistically significant for 1997 (but not for 1984). The intercept also increased in 1997 for the 75-and-older group (but not for the 65- to 74-year-olds), indicating that expenditures were higher for the control group in 1997.

For both age groups, though, the MPC decreased, as shown in table 3. This is consistent with the increase in expenditures for food away from home for both groups. Note that although total expenditures for the older group increased by a larger proportion (24 percent) than food expenditures (8 percent), a fact that, all other things being equal, would increase the income elasticity of food expenditures, the decrease in the MPC was enough to offset these changes and to cause the elasticity to fall, if slightly.

Shelter and utilities. Regardless of the year, the majority of control group members are predicted to be homeowners. In fact, the predicted values are remarkably similar for each age group, regardless of the year, despite the higher predicted probability of ownership for each group in 1997. In 1984, for example, the predicted probability of ownership for 65- to 74-year-olds is 58 percent, compared with 56 percent for the 75-or-older group. In 1997, the probability increases to 72 percent for the former and 76 percent for the latter.[22] In neither age group is the intercept (indicating a "base" probability for 1984) statistically significant, although for each of them, the coefficient for 1997 is positive and statistically significant at the 99-percent confidence level. The income parameter is statistically significant (again at the 99-percent level) for the 65- to 74-year-old group in 1984, but there is no significant change in the relationship between their probability of owning and permanent income for 1997. For the 75-and-older group, the income effect is not statistically significant in 1984,[23] and there is no evidence of a change in the relationship by 1997. Households consisting of a husband and wife only are more likely to own than are single females in either year, regardless of the age group. Similarly, families with three or more members are more likely to own, regardless of the year.[24] Probability of ownership increases with education for the younger age group, but not for the older. However, the probability of ownership is lower for Hispanics in each age group and for blacks in the older group, but not for blacks in the younger group. Probability of ownership also decreases significantly for Northeasterners in 1997, although it is higher for rural families in each year. (See table 5.)

Expenditure patterns for owners show different changes by age group in each year. For example, for 65- to 74-year-olds in 1997, both the intercept and the income coefficient decrease significantly. (See table 6.) However, for those 75 and older in 1997, both coefficients increase, although the change in the intercept is not statistically significant. Note that for the latter group, these changes, coupled with the aforementioned increase in total expenditures (24 percent) and a smaller increase in shelter and utilities expenditures (11 percent), contribute to a substantial increase in income elasticity for owners in the group. However, for the younger group, estimated income elasticity is substantially lower for 1997 than for 1984. Again, the opposite of the older group holds for the younger group: a smaller MPC in 1997 is accompanied by an increase in total expenditure (8 percent) that is smaller than the percent increase in expenditures for shelter and utilities (15 percent), all of which act to make the elasticity for the group smaller in 1997 than 1984.

For renters in both age groups, expenditure patterns are remarkably stable. For both age groups, expenditures appear to have increased in 1997 for those who attended college. (See table 7.) Other than this, the only statistically significant variables for the 65- to 74-year-old group in 1997 are family size (multiple members) and regional variables; expenditures for this group appear to have risen for residents of the Midwest and West. For those 75 and older, the intercept is significantly larger in 1997, as is the MPC. Also, the coefficient for number of bathrooms is statistically significant (and negative) for 1997. Both age groups are fairly homogeneous, with few other parameter estimates being statistically significant, regardless of the year. For the younger age group, only coefficients for family type (husband and wife only; other families), rural residence, and number of rooms are statistically significant. The rural coefficient is negative, but the others are positive. For the older group, living in a rural area is also associated with lower expenditures, while the numbers of bathrooms and half bathrooms appear to increase expenditures for housing for this group.

Although these expenditures are similar for each age group in each year, MPCs and elasticities are quite different for each group of renters and, in fact, change differently over time. (See table 3.) For the younger age group, the MPC for 1997 does not differ from that for 1984 in any statistically significant way. For the older group, however, the MPC increases substantially from 1984 to 1997. Despite a similar increase for both groups in expenditures for shelter and utilities (27 per-

Table 4. Regression results, food-at-home model

Variable	65-to-74 age group				75-and-older age group			
	Parameter estimate	Standard error	*T* for H_0: parameter = 0	Prob > |T|	Parameter estimate	Standard error	*T* for H_0: parameter = 0	Prob > |T|
Intercept	403.101	30.357	13.278	0.000	338.513	24.321	13.918	0.000
Interaction, 1997	–11.200	42.766	–.262	.793	94.069	31.917	2.947	.003
Total expenditures	.030	.002	15.164	.000	.020	.002	10.765	.000
Interaction, 1997	–.010	.003	–3.822	.000	–.004	.002	–1.970	.049
Family composition:								
Single man	–5.935	37.995	–.156	.876	–8.501	31.038	–.274	.784
Interaction, 1997	–19.373	52.031	–.372	.710	–28.626	40.560	–.706	.480
Husband and wife only	285.910	25.357	11.276	.000	298.351	22.419	13.308	.000
Interaction, 1997	31.346	35.033	.895	.371	–43.760	29.579	–1.479	.139
Other family	250.735	38.796	6.463	.000	256.624	33.671	7.622	.000
Interaction, 1997	3.104	55.841	.056	.956	–23.902	44.958	–.532	.595
At least three members	399.208	43.666	9.142	.000	336.898	51.675	6.520	.000
Interaction: 1997	–95.512	62.111	–1.538	.124	–262.075	68.098	–3.849	.000
Education of the reference person:								
High school graduate	–36.895	22.863	–1.614	.107	29.567	24.503	1.207	.228
Interaction, 1997	28.102	33.007	.851	.395	–75.452	30.809	–2.449	.014
Attended college	–25.177	25.857	–.974	.330	21.562	23.381	.922	.357
Interaction, 1997	48.397	35.719	1.355	.176	41.324	30.475	1.356	.175
Ethnic origin of the reference person:								
Hispanic	–56.893	54.281	–1.048	.295	7.585	61.002	.124	.901
Interaction, 1997	40.836	68.774	.594	.553	42.735	75.506	.566	.571
Black	–80.881	41.479	–1.950	.051	–29.130	38.519	–.756	.450
Interaction, 1997	41.855	52.705	.794	.427	–18.202	52.035	–.350	.727
Number of earners:								
One earner	–7.551	23.043	–.328	.743	14.929	29.006	.515	.607
Interaction, 1997	–37.725	32.305	–1.168	.243	70.552	38.168	1.848	.065
Two earners	–43.355	36.701	–1.181	.238	–137.214	71.780	–1.912	.056
Interaction, 1997	–12.542	50.238	–.250	.803	291.068	89.199	3.263	.001
Three or more earners	127.267	64.893	1.961	.050	–164.309	111.276	–1.477	.140
Interaction, 1997	180.006	95.493	1.885	.060	1150.001	165.953	6.930	.000
Housing tenure:								
Own home, no mortgage	78.162	26.139	2.990	.003	1.755	44.296	.040	.968
Interaction, 1997	–9.083	36.161	–.251	.802	50.831	52.364	.971	.332
Renter	12.231	24.658	.496	.620	–30.740	20.080	–1.531	.126
Interaction, 1997	4.793	35.605	.135	.893	–24.359	27.756	–.878	.380
Region of residence:								
Northeast	67.467	26.394	2.556	.011	40.298	24.917	1.617	.106
Interaction, 1997	10.329	37.171	.278	.781	–26.421	33.747	–.783	.434
Midwest	–49.656	25.821	–1.923	.055	–11.106	23.869	–.465	.642
Interaction, 1997	37.644	35.447	1.062	.288	–71.070	31.118	–2.284	.022
West	13.328	28.120	.474	.636	46.241	28.297	1.634	.102
Interaction, 1997	45.233	39.414	1.148	.251	–28.196	35.704	–.790	.430
Degree of urbanization:								
Rural	–42.120	27.580	–1.527	.127	–4.654	25.766	–.181	.857
Interaction, 1997	24.677	40.150	.615	.539	–20.702	36.031	–.575	.566

Table 5. Regression results, probability-of-homeownership model

Variable	65-to-74 age group			75-and-older age group		
	Parameter estimate	Standard error	Pr > chi-square	Parameter estimate	Standard error	Pr > chi-square
Intercept	–0.064	0.090	0.477	0.062	0.090	0.491
Interaction, 1997	.389	.129	.003	.521	.123	.000
Total expenditures	4.42×10^{-5}	1.00×10^{-5}	1.00×10^{-4}	2.16×10^{-5}	1.20×10^{-5}	.076
Interaction, 1997	-6.71×10^{-6}	1.30×10^{-5}	6.05×10^{-1}	8.65×10^{-7}	1.50×10^{-5}	.954
Family composition:						
Single man	–.007	.108	.946	.354	.116	.002
Interaction, 1997	–.453	.149	.002	–.180	.154	.242
Husband and wife only	.901	.081	.000	.942	.092	.000
Interaction, 1997	–.216	.115	.061	–.077	.125	.539
Other family	.183	.114	.110	.592	.131	.000
Interaction, 1997	.083	.170	.628	–.178	.182	.328
At least three members	.689	.141	.000	.684	.268	.011
Interaction, 1997	–.370	.203	.068	–.425	.339	.211
Education of the reference person:						
High school graduate	.191	.075	.011	.144	.098	.144
Interaction, 1997	.072	.108	.503	–.191	.125	.127
Attended college	.423	.090	.000	.062	.095	.511
Interaction, 1997	–.033	.123	.786	-.053	.125	.671
Ethnic origin of the reference person:						
Hispanic	–.562	.167	.001	–.658	.223	.003
Interaction, 1997	.178	.213	.405	–.129	.278	.644
Black	–.169	.127	.183	–.513	.147	.001
Interaction, 1997	–236	.160	.141	.112	.200	.577
Number of earners:						
One earner	.067	.077	.387	–029	.121	.808
Interaction, 1997	–.171	.109	.118	.344	.168	.041
Two earners	–.069	.130	.597	5.223	2,991.958	.999
Interaction, 1997	–.006	.186	.976	–5.222	2,991.958	.999
Three or more earners	.651	.348	.062	4.914	4,988.488	.999
Interaction, 1997	.156	.538	.772	–4.835	4,988.488	.999
Region of residence:						
Northeast	–.094	.087	.279	–.251	.099	.011
Interaction, 1997	–.281	.123	.023	–.292	.135	.031
Midwest	.064	.086	.456	–.039	.096	.688
Interaction, 1997	–.016	.122	.895	–.322	.128	.012
West	–.090	.094	.341	.035	.113	.755
Interaction, 1997	–.104	.134	.436	–.294	.146	.044
Degree of urbanization:						
Rural	.229	.091	.012	.302	.108	.005
Interaction, 1997	.194	.148	.191	–185	.155	.234
Housing characteristics:						
Number of rooms	.485	.031	.000	.407	.030	.000
Interaction, 1997	–.053	.044	.235	.076	.039	.048
Number of bathrooms	.276	.114	.015	.400	.138	.004
Interaction, 1997	.155	.146	.287	–332	.156	.033
Number of half bathrooms	.667	.122	.000	.500	.127	.000
Interaction, 1997	–.304	.154	.048	–.383	.163	.019

Note: In this form of regression analysis, the standard error of the parameter estimate is drawn from a chi-square distribution. The value "Pr > chi-square" then denotes the level of statistical signigicance of the parameter estimate. A value less than or equal to 0.05 indicates statistical significance at the 95-percent confidence level; a value less than or equal to 0.01 indicates statistical significance at the 99-percent confidence level.

Table 6. Regression results, shelter and utilities (owners) model

Variable	65–to–74 age group				75–and–older age group			
	Parameter estimate	Standard error	*T* for H_0: parameter = 0	Prob > |T|	Parameter estimate	Standard error	*T* for H_0: parameter = 0	Prob > |T|
Intercept	445.260	108.100	4.119	0.000	–54.221	141.541	–0.383	0.702
Interaction, 1997	–464.748	152.016	–3.057	.002	170.217	186.836	.911	.362
Total expenditures	.072	.005	15.302	.000	.047	.006	8.123	.000
Interaction, 1997	–.013	.006	–2.049	.041	.018	.007	2.533	.011
Family composition:								
Single man	–204.194	110.479	–1.848	.065	106.234	115.604	.919	.358
Interaction, 1997	248.420	150.469	1.651	.099	–104.129	147.639	–.705	.481
Husband and wife only	–151.095	63.646	–2.374	.018	35.217	75.355	.467	.640
Interaction, 1997	71.138	86.680	.821	.412	–43.215	98.258	–.440	.660
Other family	–155.225	100.808	–1.540	.124	–33.587	110.621	–.304	.761
Interaction, 1997	156.767	140.102	1.119	.263	–115.585	144.753	–.798	.425
At least three members	52.346	104.176	.502	.615	212.082	146.765	1.445	.149
Interaction, 1997	19.861	146.908	.135	.893	–145.753	198.120	-.736	.462
Education of the reference person:								
High school graduate	45.294	57.418	.789	.430	113.220	85.050	1.331	.183
Interaction, 1997	30.361	82.367	.369	.712	-74.051	106.894	-.693	.489
Attended college	157.256	64.214	2.449	.014	140.428	85.810	1.637	.102
Interaction, 1997	118.202	89.025	1.328	.184	9.949	109.237	.091	.927
Ethnic origin of the reference person:								
Hispanic	–43.272	151.289	–.286	.775	–287.103	263.950	–1.088	.277
Interaction, 1997	108.419	188.687	.575	.566	426.797	320.775	1.331	.184
Black	81.701	115.029	.710	.478	46.369	148.303	.313	.755
Interaction, 1997	–129.656	144.343	–.898	.369	101.825	196.315	.519	.604
Region of residence:								
Northeast	353.452	67.104	5.267	.000	471.535	89.669	5.259	.000
Interaction, 1997	224.081	94.348	2.375	.018	3.596	120.512	.030	.976
Midwest	198.275	64.237	3.087	.002	55.688	84.069	.662	.508
Interaction, 1997	–18.387	87.090	–.211	.833	2.600	108.152	.024	.981
West	–54.289	69.890	–.777	.437	43.155	98.091	.440	.660
Interaction, 1997	234.287	97.208	2.410	.016	205.410	121.986	1.684	.092
Degree of urbanization:								
Rural	–216.271	68.750	–3.146	.002	–116.735	89.125	–1.310	.190
Interaction, 1997	53.357	96.946	.550	.582	96.479	121.391	.795	.427
Housing characteristics:								
Number of rooms	–17.867	18.604	–.960	.337	50.018	23.878	2.095	.036
Interaction, 1997	54.208	24.381	2.223	.026	–25.294	31.329	–.807	.420
Number of bathrooms	294.281	50.486	5.829	.000	392.340	69.656	5.633	.000
Interaction, 1997	–23.303	66.918	–.348	.728	–146.041	87.581	–1.668	.096
Number of half bathrooms	126.971	47.143	2.693	.007	73.793	70.116	1.052	.293
Interaction, 1997	22.952	62.252	.369	.712	97.979	89.582	1.094	.274
Home owned without mortgage	344.378	57.819	5.956	.000	477.952	127.282	3.755	.000
Interaction, 1997	461.323	79.644	5.792	.000	233.220	151.309	1.541	.123

Table 7. Regression results, shelter and utilities (renters) model

Variable	65-to-74 age group				75-and-older age group			
	Parameter estimate	Standard error	*T* for H_0: parameter = 0	Prob > |*T*|	Parameter estimate	Standard error	*T* for H_0: parameter = 0	Prob > |*T*|
Intercept	277.627	146.632	1.893	0.059	–280.046	217.740	–1.286	0.199
Interaction, 1997	–243.468	197.823	–1.231	.219	883.601	270.361	3.268	.001
Total expenditures	.094	.012	8.142	.000	.119	.016	7.554	.000
Interaction, 1997	–.013	.014	–.979	.328	.070	.020	3.488	.001
Family composition:								
Single man	132.063	85.857	1.538	.124	–50.840	141.541	–.359	.720
Interaction, 1997	74.820	116.399	.643	.521	134.124	188.141	.713	.476
Husband and wife only	218.094	85.741	2.544	.011	117.967	121.355	.972	.331
Interaction, 1997	160.525	120.394	1.333	.183	112.870	175.400	.644	.520
Other family	225.566	96.576	2.336	.020	72.811	152.779	.477	.634
Interaction, 1997	70.161	152.227	.461	.645	41.933	223.120	.188	.851
At least three members	–57.687	132.499	–.435	.663	142.728	406.379	.351	.726
Interaction, 1997	394.436	192.920	2.045	.041	6.667	496.083	.013	.989
Education of the reference person:								
High school graduate	106.656	66.696	1.599	.110	212.486	116.709	1.821	.069
Interaction, 1997	25.699	98.360	.261	.794	–174.139	148.485	–1.173	.241
Attended college	92.972	86.613	1.073	.283	189.409	106.645	1.776	.076
Interaction, 1997	256.266	117.398	2.183	.029	530.867	149.955	3.540	.000
Ethnic origin of the reference person:								
Hispanic	227.877	119.722	1.903	.057	–111.584	211.851	–.527	.599
Interaction, 1997	–298.195	159.130	–1.874	.061	–58.818	268.346	–.219	.827
Black	–160.968	108.217	–1.487	.137	–223.037	159.441	–1.399	.162
Interaction, 1997	–28.301	133.514	–.212	.832	–152.416	212.867	–.716	.474
Region of residence:								
Northeast	2.179	77.630	.028	.978	94.570	110.298	.857	.391
Interaction, 1997	207.025	111.100	1.863	.063	–130.889	156.927	–.834	.404
Midwest	–23.460	78.132	–.300	.764	43.468	111.086	.391	.696
Interaction, 1997	260.096	116.720	2.228	.026	–42.073	156.615	–.269	.788
West	143.015	83.572	1.711	.087	92.550	130.487	.709	.478
Interaction, 1997	247.338	120.923	2.045	.041	–155.074	176.691	–.878	.380
Degree of urbanization								
Rural	–350.615	91.482	–3.833	.000	–323.272	147.021	–2.199	.028
Interaction, 1997	-83.821	149.703	–.560	.576	–141.411	214.027	–.661	.509
Housing characteristics:								
Number of rooms	69.507	24.192	2.873	.004	49.805	31.836	1.564	.118
Interaction, 1997	48.391	35.358	1.369	.171	–65.032	45.922	–1.416	.157
Number of bathrooms	195.026	112.982	1.726	.085	809.720	185.694	4.361	.000
Interaction, 1997	49.573	144.066	.344	.731	–599.729	208.867	–2.871	.004
Number of half bathrooms	166.061	136.634	1.215	.225	490.383	177.226	2.767	.006
Interaction, 1997	–160.828	173.546	–.927	.354	–296.626	232.655	–1.275	.203

cent for the younger and 30 percent for the older), the elasticities move in opposite directions. For the younger group, the elasticity falls by more than one-fourth its original value, from 0.456 to 0.336. However, for the older group, the elasticity increases by more than half, from 0.386 to 0.586.

Apparel and services. The 65- to 74-year-old age group exhibits remarkably stable and homogeneous expenditure patterns for apparel and services. (See table 8.) Single men are predicted to spend less than single women for these items, and these expenditures also appear to increase with education. (The coefficient for high school graduates is positive and statistically significant, and the coefficient for at least some college is larger than that for high school graduates and also statistically significant.) Otherwise, no coefficients are statistically significant for this expenditure for the younger age group, regardless of the year.

On the other hand, the group 75 years and older exhibits more diversity in expenditures for apparel and services. Family type (husband and wife only; other families) and family size (multiple members) are statistically significant predictors of expenditures. In each case, the main coefficient for the group is positive, with the 1997 parameter estimate negative. However, the coefficients vary as to magnitude and statistical significance. For example, the coefficient for husband and wife only is statistically significant, but the change for 1997 is not. The coefficients for multiple-member households exhibit a similar pattern, except that the 1997 coefficient is larger in absolute value than the main coefficient. It is not statistically significant at the 95-percent confidence level, but is nearly so. (The p-value is 0.0545.) These expenditures are also predicted to increase with education and to be higher for the Northeast in 1997 than in 1984. Although neither the main coefficient nor the 1997 coefficient is statistically significant for two-earner households in the 75-and-older group, expenditures are predicted to be greater for one-earner and multiple-earner households than for those with no earner. (Both of the coefficients for one-earner families are positive and statistically significant. For multiple earners, the first is positive and statistically significant, while the second is negative and not statistically significant; it is also smaller in absolute value than the main coefficient.)

For 65- to 74-year-olds, there is little change in MPC or elasticity. (See table 3.) Although slightly lower in 1997, the MPC is not statistically significantly different that year from it was in 1984. However, for the 75-or-older group, there are notable changes: the MPC nearly doubles, from 0.007 to 0.012, and the elasticity more than doubles, from 0.233 to 0.552. The proportional response in elasticity is greater than the proportional response in MPC because of a decrease in expenditures for apparel and services for this group, despite increased total expenditures.

Transportation. The predicted probability of incurring an expenditure for transportation (derived from the first stage of the Tobit regression) is much different for the two age groups. For control group members in the younger age group, the predicted probability decreases from 73 percent to 69 percent from 1984 to 1997. For the older group, however, the probability rises from 35 percent to 43 percent over the same period. However, regardless of the year, this expenditure category exhibits the largest gap in probability of incurring an expenditure of all expenditure categories tested.

In each age group, there are only a few characteristics with statistically significant coefficients (see table 9), but the second group has even fewer than the first. As expected, number of vehicles is a statistically significant predictor of expenditures for both groups. For the 65- to 74-year-old group, only the main coefficient is statistically significant; for the 75-and-older group, the vehicle coefficient for 1997 is also statistically significant.

For both age groups, there are statistically significant changes in the MPC for transportation. (See table 3.) Despite a substantial decrease in the MPC for the younger age group, transportation expenditures remain a luxury good, with an elasticity estimated to be greater than unity in both periods. For the older group, the MPC increases substantially—about 166 percent—from 1984 to 1997. The income elasticity of transportation for the 75-and-older group also more than doubles, rising about 146 percent. Nevertheless, transportation expenditures remain a necessity, with elasticity less than unity in each year.

Recreation and related items. Expenditures for recreation and related items are also mostly unaffected by changes in underlying tastes and preferences among the members of the group. For the 65- to 74-year-olds, for example, only a few characteristics have coefficients that distinguish them in a statistically significant way from the control group. (See table 10.) However, not one of these coefficients changes in a statistically significant way for the 1997 data. Only two characteristics—other families and at least some college—exhibit statistically significant changes in 1997 for those 75 years and older. (West is significant at the 90-percent level.)

Nevertheless, there is a significant change in the MPC for each group. (See table 3.) For the younger group, a slight, but statistically significant, decline in the MPC led to a slightly lower income elasticity in 1997. The MPC was almost completely responsible for this change in elasticity, as the increase in for recreation and related items (9 percent) was nearly the same as the increase in total expenditures (8 percent) for that age group. For the older group, however, the MPC nearly doubled, from 0.031 in 1984 to 0.059 in 1997. But in this case, the increase in elasticity (0.313 to 0.518), while substantial, was smaller in terms of percentages. This is again because expenditures for recreation and related items rose nearly 43 percent for the group from 1984 to 1997, compared with 24 percent for total expenditures.

Table 8. Regression results, apparel and services model

Variable	65-to-74 age group			75-and-older age group		
	Parameter estimate	Standard error	Pr > chi-square	Parameter estimate	Standard error	Pr > chi-square
Intercept	–46.8943	30.5691	0.1250	–95.4134	25.2138	0.0002
Interaction, 1997	–76.8399	43.4418	.0769	–96.1941	33.1158	.0037
Total expenditures	.0350	.0020	.0001	.0159	.0018	.0001
Interaction, 1997	–.0025	.0026	.3254	.0108	.0019	.0001
Family composition:						
Single man	–106.3894	38.9776	.0063	–43.8973	32.6633	.1790
Interaction, 1997	36.0780	53.6042	.5009	–28.5791	42.7659	.5040
Husband and wife only	–19.6102	25.4021	.4401	56.9469	22.9020	.0129
Interaction, 1997	12.5961	35.3389	.7215	–28.3039	29.9428	.3445
Other family	–42.1493	39.2241	.2826	48.7065	34.2793	.1554
Interaction, 1997	92.5978	56.3834	.1005	–103.9181	46.1319	.0243
At least three members	46.3191	43.7829	.2901	105.4164	52.0942	.0430
Interaction, 1997	–82.3343	62.3292	.1865	–132.4358	68.8734	.0545
Education of the reference person:						
High school graduate	58.6025	22.9001	.0105	45.3923	24.9450	.0688
Interaction, 1997	4.9306	33.3886	.8826	1.9453	31.6564	.9510
Attended college	145.2861	25.6761	.0001	89.2610	23.6212	.0002
Interaction, 1997	–27.0341	35.7986	.4501	21.4167	30.9522	.4890
Ethnic origin of the reference person:						
Hispanic	17.1525	54.2737	.7520	–68.8128	63.4958	.2785
Interaction, 1997	–10.6444	69.3377	.8780	84.6424	78.5919	.2815
Black	28.4361	42.0365	.4987	–46.3271	40.3884	.2514
Interaction, 1997	–18.1598	53.7475	.7355	60.4512	54.2782	.2654
Number of earners:						
One earner	15.6418	23.1024	.4984	62.3816	29.1545	.0324
Interaction, 1997	28.0304	32.4654	.3879	91.6086	38.3732	.0170
Two earners	45.6717	36.2725	.2080	82.8707	71.4754	.2463
Interaction, 1997	47.4833	49.8324	.3407	–30.2634	89.3942	.7350
Three or more earners	–67.3820	64.5646	.2967	199.3111	109.0852	.0677
Interaction, 1997	132.3488	95.2680	.1648	–59.3506	163.0817	.7159
Housing tenure:						
Own home, no mortgage	25.1384	26.0351	.3343	124.6274	44.3843	.0050
Interaction, 1997	–43.9434	36.2234	.2251	53.2468	52.4404	.3099
Renter	–19.1718	24.8275	.4400	47.4319	20.5275	.0209
Interaction, 1997	–20.8930	36.1217	.5630	–15.0471	28.5130	.5977
Region of residence:						
Northeast	13.2480	26.4119	.6160	–14.3250	25.5111	.5744
Interaction, 1997	12.7164	37.3989	.7338	82.3344	34.5271	.0171
Midwest	4.7143	25.9368	.8558	7.3365	24.3673	.7634
Interaction, 1997	17.9490	35.7657	.6158	–22.1002	32.0543	.4905
West	1.4211	28.0278	.9596	40.5101	28.6060	.1567
Interaction, 1997	–10.4979	39.6253	.7911	–3.6511	36.2857	.9199
Degree of urbanization:						
Rural	–41.2109	27.8115	.1384	–21.4374	26.7158	.4223
Interaction, 1997	–10.6170	40.7337	.7944	36.4755	37.5127	.3309
Normal scale parameter	441.0108	5.0795	–	335.8598	4.6817	–

NOTE: In this form of regression analysis, the standard error of the parameter estimate is drawn from a chi-square distribution. The value "Pr > chi-square" then denotes the level of statistical significance of the parameter estimate. A value less than or equal to 0.05 indicates statistical significance at the 95-percent confidence level; a value less than or equal to 0.01 indicates statistical significance at the 99-percent confidence level. Dash = data not applicable.

Table 9. Regression results, transportation model

Variable	65-to-74 age group			75-and-older age group		
	Parameter estimate	Standard error	Pr > chi-square	Parameter estimate	Standard error	Pr > chi-square
Intercept	–1,282.6087	152.2224	0.0001	–1,117.5075	146.0113	0.0001
Interaction, 1997	81.9515	216.6190	.7052	–283.9626	189.7641	.1346
Total expenditures	0.4383	.0100	.0001	.1013	.0101	.0001
Interaction, 1997	-0.0895	.0130	.0001	.1159	.0109	.0001
Family composition:						
Single man	13.4755	190.4656	.9436	11.2948	182.0738	.9505
Interaction, 1997	–87.4840	259.9384	.7365	278.3308	231.1425	.2285
Husband and wife only	–428.4149	129.6026	.0009	–99.8312	134.0037	.4563
Interaction, 1997	195.2106	179.4105	.2766	219.3074	175.6071	.2117
Other family	–97.2483	192.6126	.6136	–124.6617	200.4178	.5339
Interaction, 1997	–260.4390	277.7466	.3484	247.6954	260.9731	.3426
At least three members	–607.8549	217.6716	.0052	364.5536	289.7762	.2084
Interaction, 1997	897.9912	306.0321	.0033	–567.7013	378.6689	.1338
Education of the reference person:						
High school graduate	–306.4993	112.6678	.0065	17.9175	139.6478	.8979
Interaction, 1997	435.4585	162.6865	.0074	143.4543	174.5400	.4111
Attended college	–896.9442	126.8465	.0001	119.0095	133.3479	.3721
Interaction, 1997	504.7721	175.1627	.0040	–275.1857	172.1986	.1100
Ethnic origin of the reference person:						
Hispanic	198.8331	270.3460	.4620	–261.4778	391.6536	.5044
Interaction, 1997	212.3360	342.1825	.5349	57.4418	471.1235	.9030
Black	–133.1006	213.0494	.5321	–202.6169	228.4373	.3751
Interaction, 1997	471.5515	268.3086	.0788	340.3642	306.8260	.2673
Number of earners:						
One earner	–218.3645	113.2240	.0538	118.0555	163.3065	.4697
Interaction, 1997	54.3979	158.1419	.7309	–501.1135	211.7987	.0180
Two earners	–26.1406	178.7965	.8838	–1,084.3397	398.8703	.0066
Interaction, 1997	–207.0008	244.8192	.3978	1,120.4351	489.9219	.0222
Three or more earners	300.9398	316.6610	.3419	1,661.9822	613.4620	.0067
Interaction, 1997	–1,583.0886	468.8543	.0007	–811.3906	913.9191	.3746
Housing tenure:						
Own home, no mortgage	–168.9665	127.9080	.1865	129.1995	244.0939	.5966
Interaction, 1997	–30.9189	176.6610	.8611	–325.3182	288.9685	.2603
Renter	–55.2726	124.6477	.6575	63.9215	122.6355	.6022
Interaction, 1997	–54.5289	180.7669	.7629	–88.7453	165.5110	.5918
Region of residence:						
Northeast	–90.8173	129.7525	.4840	–193.0416	143.1302	.1774
Interaction, 1997	–150.3166	183.6971	.4132	–13.2903	192.5711	.9450
Midwest	20.9427	127.1265	.8691	–207.9780	136.9389	.1288
Interaction, 1997	–125.0566	173.9251	.4721	244.1025	176.2924	.1662
West	–64.0350	138.8221	.6446	–128.4680	161.2772	.4257
Interaction, 1997	–347.9159	193.8277	.0727	80.2238	201.8468	.6910
Degree of urbanization:						
Rural	121.9668	139.1696	.3808	–318.3385	149.7773	.0336
Interaction, 1997	95.7775	200.3362	.6326	449.9963	205.8721	.0288
Number of vehicles	256.4988	42.3051	.0001	1,083.8082	74.9669	.0001
Interaction, 1997	13.5857	57.5517	.8134	–477.5247	87.5964	.0001
Normal scale parameter	2,185.7595	23.2308	–	1,859.9874	23.4656	–

NOTE: In this form of regression analysis, the standard error of the parameter estimate is drawn from a chi-square distribution. The value "Pr > chi-square" then denotes the level of statistical significance of the parameter estimate. A value less than or equal to 0.05 indicates statistical significance at the 95-percent confidence level; a value less than or equal to 0.01 indicates statistical significance at the 99-percent confidence level. Dash = data not applicable.

Table 10. Regression results, recreation and related expenditures model

Variable	65-to 74-age group			75-and-older age group		
	Parameter estimate	Standard error	Pr > chi-square	Parameter estimate	Standard error	Pr > chi-square
Intercept	–309.1186	64.1165	0.0001	–178.4842	66.4207	0.0072
Interaction, 1997	154.7560	90.0096	.0856	73.2151	86.4337	.3970
Total expenditures	.1054	.0042	.0001	.0586	.0048	.0001
Interaction, 1997	–.0202	.0054	.0002	.0322	.0059	.0001
Family composition:						
Single man	161.8007	80.8154	.0453	–28.1746	86.1891	.7437
Interaction, 1997	–52.1522	110.3649	.6365	60.3039	111.0534	.5871
Husband and wife only	111.4271	53.3429	.0367	129.0293	60.6776	.0335
Interaction, 1997	4.0221	73.4480	.9563	7.9356	79.4907	.9205
Other family	–21.7646	82.0935	.7909	–27.4657	91.7746	.7647
Interaction, 1997	36.2419	117.4906	.7577	244.9133	121.2806	.0434
At least three members	–70.3285	91.9118	.4442	6.6349	138.6312	.9618
Interaction, 1997	95.2692	130.0852	.4639	–204.2181	182.5316	.2632
Education of the reference person:						
High school graduate	106.8374	47.7690	.0253	123.0132	65.6114	.0608
Interaction, 1997	36.0755	69.0138	.6012	–98.7555	82.5428	.2315
Attended college	267.7578	53.9204	.0001	205.7596	62.5842	.0010
Interaction, 1997	–22.6743	74.4812	.7608	–202.1044	81.3903	.0130
Ethnic origin of the reference person:						
Hispanic	–116.2976	115.1589	.3125	–257.0763	175.1169	.1421
Interaction, 1997	–63.0959	145.7068	.6650	133.6666	212.9558	.5302
Black	–150.1014	90.9292	.0988	–355.1262	114.9102	.0020
Interaction, 1997	–46.7505	114.1945	.6823	207.0746	149.3673	.1656
Number of earners:						
One earner	110.1382	48.2743	.0225	83.1907	77.6281	.2839
Interaction, 1997	–89.7239	67.4906	.1837	–98.6128	101.7122	.3323
Two earners	43.4761	76.5726	.5702	335.5846	190.2004	.0777
Interaction, 1997	–120.2709	104.5752	.2501	–231.8322	236.5666	.3271
Three or more earners	54.4818	135.5226	.6877	214.3508	293.5319	.4652
Interaction, 1997	–6.3494	198.7433	.9745	–370.9833	437.5975	.3966
Housing tenure:						
Own home, no mortgage	–156.8092	54.5108	.0040	–25.8074	119.4710	.8290
Interaction, 1997	89.1009	75.2836	.2366	–68.2402	140.6560	.6276
Renter	–89.3537	52.2947	.0875	–134.0622	55.1071	.0150
Interaction, 1997	–93.1471	75.2479	.2158	23.1008	75.5141	.7597
Region of residence:						
Northeast	96.5084	55.3989	.0815	130.0649	67.4106	.0537
Interaction, 1997	–71.7679	77.9011	.3569	–131.7696	90.8023	.1467
Midwest	84.2802	54.4455	.1216	60.8805	64.9392	.3485
Interaction, 1997	11.3258	74.3639	.8789	–80.1066	84.0724	.3407
West	117.8678	58.7516	.0448	111.2569	76.5861	.1463
Interaction, 1997	3.6081	82.3416	.9650	–167.0395	96.0528	.0820
Degree of urbanization:						
Rural	–190.1546	58.9572	.0013	–136.2073	71.1919	.0557
Interaction, 1997	82.8174	84.8887	.3293	–.9621	98.3209	.9922
Normal scale parameter	935.0373	9.9151	–	914.3836	11.3657	–

NOTE: In this form of regression analysis, the standard error of the parameter estimate is drawn from a chi-square distribution. The value "Pr > chi-square" then denotes the level of statistical significance of the parameter estimate. A value less than or equal to 0.05 indicates statistical significance at the 95-percent confidence level; a value less than or equal to 0.01 indicates statistical significance at the 99-percent confidence level. Dash = data not applicable.

Table 11. Regression results, health care model

Variable	65-to-74 age group			75-and-older age group		
	Parameter estimate	Standard error	Pr > chi-square	Parameter estimate	Standard error	Pr > chi-square
Intercept	223.9060	56.4559	0.0001	253.0077	64.7001	0.0001
Interaction, 1997	6.9065	79.4774	.9308	167.9463	84.8354	.0477
Total expenditures	.0391	.0037	.0001	.0728	.0048	.0001
Interaction, 1997	.0157	.0048	.0012	–.0461	.0059	.0001
Family composition:						
Single man	5.2462	71.0663	.9412	27.8410	82.8175	.7367
Interaction, 1997	253.3079	97.1257	.0091	–12.0099	107.9800	.9114
Husband and wife only	250.9314	47.1470	.0001	202.8538	59.6988	.0007
Interaction, 1997	–36.0469	65.0912	.5797	186.7134	78.6214	.0176
Other family	38.1252	72.3052	.5980	274.0149	89.5568	.0022
Interaction, 1997	62.1256	103.8416	.5497	–158.2754	119.3435	.1848
At least three members	210.7535	81.2887	.0095	–275.1400	137.3050	.0451
Interaction, 1997	–142.2198	115.3714	.2177	569.6527	180.7353	.0016
Education of the reference person:						
High school graduate	68.1504	42.4728	.1086	–16.0053	65.1708	.8060
Interaction, 1997	–26.1641	61.2895	.6695	66.2002	81.8609	.4187
Attended college	–3.4328	48.1668	.9432	–87.8219	62.2246	.1581
Interaction, 1997	15.8264	66.4007	.8116	179.1178	80.9991	.0270
Ethnic origin of the reference person:						
Hispanic	–200.3379	101.9027	.0493	–301.0993	166.3975	.0704
Interaction, 1997	114.6322	128.8284	.3736	207.8834	204.1893	.3086
Black	–179.8736	77.6518	.0205	–162.7816	102.7526	.1131
Interaction, 1997	16.2115	98.4504	.8692	–58.5201	138.4871	.6726
Number of earners:						
One earner	–59.4657	42.8323	.1650	–10.6866	76.9638	.8896
Interaction, 1997	42.4797	60.0172	.4791	–104.4342	101.2229	.3022
Two earners	–212.4772	68.4218	.0019	174.4789	190.2329	.3590
Interaction, 1997	134.7943	93.3865	.1489	–398.1259	236.7401	.0926
Three or more earners	–385.3804	121.0232	.0015	–115.1714	294.9261	.6962
Interaction, 1997	215.4131	177.6961	.2254	–279.6434	443.0965	.5280
Housing tenure:						
Own home, no mortgage	–60.6884	48.5389	.2112	–106.0491	117.4977	.3668
Interaction, 1997	–72.3782	67.1084	.2808	86.9876	138.8534	.5310
Renter	–82.8292	45.9818	.0716	–82.8038	53.5538	.1221
Interaction, 1997	–52.6363	66.3153	.4274	–43.9237	73.8472	.5520
Region of residence:						
Northeast	.2106	49.0971	.9966	–149.5733	66.3453	.0242
Interaction, 1997	–37.4756	69.1071	.5876	143.5455	89.6950	.1095
Midwest	.0354	48.0572	.9994	38.2762	63.4343	.5462
Interaction, 1997	–16.0351	65.8620	.8076	–20.1698	82.6365	.8072
West	–29.7791	52.3204	.5692	–83.2579	75.5497	.2704
Interaction, 1997	–23.0631	73.2812	.7530	–25.9616	95.0771	.7848
Degree of urbanization:						
Rural	55.8260	51.3555	.2770	–37.4692	68.7666	.5858
Interaction, 1997	–16.0838	74.5633	.8292	84.3778	95.8634	.3788
Received reimbursement for health care	289.1046	128.0072	.0239	–229.1799	186.7067	.2196
Interaction, 1997	302.8359	204.7514	.1391	65.8207	275.7782	.8114
Normal scale parameter	836.2532	8.7168	–	920.0360	10.8666	–

NOTE: In this form of regression analysis, the standard error of the parameter estimate is drawn from a chi-square distribution. The value "Pr > chi-square" then denotes the level of statistical significance of the parameter estimate. A value less than or equal to 0.05 indicates statistical significance at the 95-percent confidence level; a value less than or equal to 0.01 indicates statistical significance at the 99-percent confidence level. Dash = data not applicable.

Health care. As noted earlier, the allocation of the health care budget has changed for both age groups. The literature shows—and results here confirm—that both age groups are spending more on insurance and less on services and other health care items. This apportionment is not surprising, because, unlike some expenditures, health care is designed to contain goods that may be substitutes. That is, the purpose of purchasing health insurance is to minimize expected expenditures for other health care items. Therefore, at least in the regression analysis, it may be more appropriate to examine health care expenditures on the whole, rather than to look at individual components, to see what kinds of changes may have occurred overall.

As with many other expenditures examined, only a few characteristics of members of the two age groups have any statistically significant explanatory effect. (See table 11.) For 65- to 74-year-olds, families consisting of a husband and wife only and families that have multiple members spend more on health care in general. Families whose reference person is black and those with multiple earners spend less on health care than does the control group. As expected, families with reimbursements also pay less for total health care. The only statistically significant coefficient for a 1997 variable is associated with single men, who spent more for health care that year than they did in 1984. For the 75-and-older group, there are more significant coefficients, including those indicating change over time. Families consisting of a husband and wife only are predicted to spend more in 1984 than the control group, and in 1997 the difference in expenditures increased. Families with multiple members are predicted to spend less in 1984 than the control group, but the situation was reversed in 1997. Although families whose reference person attended college were not significantly different from the control group in 1984, their coefficient for 1997 is positive and statistically significant. Other coefficients, including coefficients for other families (positive), and region (Northeast is negative), are significant for 1984 and do not appear to change for 1997.

At the same time, though, the MPCs and elasticities changed over time for each group. (See table 3.) For the younger group, the MPC increased from 0.028 in 1984 to 0.042 in 1997. However, it decreased from 0.053 to 0.020 for the older group. Similarly, income elasticity increased for the younger group, from 0.275 to 0.386, and decreased for the older group, from 0.300 to 0.139.

THE DEMOGRAPHICS OF THE U.S. POPULATION are changing in many ways. One important change is the increasing average age of the population. Families whose reference person is at least 65 years old are accounting for a larger share of the population. This trend is expected to continue, given the size of the baby-boom generation, which will be reaching that age soon. Concomitantly with these changes, expenditures for different items are expected to shift in the near future. It is important to analyze these trends, then, to anticipate what may lie ahead.

The data used in this article show that older consumers account for an increasing share of total expenditures. This is to be expected, given that older persons are increasing as a percentage of the population. Trends in several expenditure items reveal an interesting pattern: although older consumers spend different amounts than younger consumers, the trends for the groups are generally similar. An examination of aggregate expenditure shares also reveals changes in spending patterns for older consumers.

But these changes may reflect only the change in the proportion of the population made up of older consumers, or they may reflect underlying changes in the demographic composition of the older population. To test whether changes are due to either of these factors or to changing tastes and preferences for the older group, regression analysis was performed. Depending on the percentage of the sample reporting given expenditures, ordinary least squares or Tobit regressions are generally used, although one probit regression is also included. The regression results are remarkably similar, in that few of the independent variables have many statistically significant coefficients, especially those that test for changes over time. The paucity of statistically significant coefficients for the characteristics suggests that older consumers are homogeneous, at least within each age group; the paucity of statistically significant coefficients that test for changes in relationships when 1984 and 1997 are compared suggests that underlying tastes and preferences for the different members of the age groups also have not changed substantially.

These findings must be interpreted carefully. Although it appears that differences in spending patterns are due more to changes in numbers of older consumers rather than changes in tastes or preferences of the two groups, it must be stressed that the consumers represented in the sample are not members of the baby-boom generation. It may well be that the baby-boomers will have different tastes and preferences when they are older consumers than those who currently are in the category. To understand how this could be, one need only consider that the youngest members of the older group in the sample under study were born between 1919 and 1932. Even the youngest of these consumers presumably has some memory of the Great Depression and certainly of World War II. Those who were born in 1945 or later have no such memories and undoubtedly were shaped in different ways by subsequent events. Accordingly, it will be important to continue to watch expenditure patterns in this group to see if there are discernible changes in patterns in the future. □

Notes

[1] Beth Harrison, "Spending patterns of older persons revealed in expenditure survey," *Monthly Labor Review*, October 1986, pp. 15–17.

[2] The basic unit of comparison in the Consumer Expenditure Surveys, a consumer unit, is defined as (1) members of a household related by blood, marriage, adoption, or some other legal arrangement; (2) a single person living alone or sharing a household with others, but who is financially independent; or (3) two or more persons living together who share responsibility for at least two out of three major types of expenses—food, housing, and other expenses. Students living in university-sponsored housing are also included in the sample as separate consumer units.

For convenience, "consumer unit" is referred to as a "family" throughout this article, even though a consumer unit can be a single person.

[3] The reference person is the first person mentioned by the respondent when asked to "Start with the name of the person or one of the persons who owns or rents this home."

[4] Thomas Moehrle, "Expenditure patterns of the elderly: workers and nonworkers," *Monthly Labor Review*, May 1990, pp. 34–41.

[5] Pamela B. Hitschler, "Spending by older consumers: 1980 and 1990 compared." *Monthly Labor Review*, May 1993, pp. 3–13.

[6] Mohamed Abdel-Ghany and Deanna L. Sharpe, "Consumption Patterns Among the Young-Old and Old-Old," *Journal of Consumer Affairs*, summer 1997 pp. 90–112.

[7] Rose M. Rubin and Michael L. Nieswiadomy, *Expenditures of Older Americans* (Westport, CT, Praeger Press, 1997).

[8] See Rubin and Nieswiadomy, *Expenditures of Older Americans*, chapter 4.

[9] For example, patterns in health care expenditures for 1980 and 1990 are compared in chapter 6 of Rubin and Nieswiadomy.

[10] A report describing the 1994–95 survey results says that the "Interview survey collects detailed data on an estimated 60 to 70 percent of total household expenditures. Global estimates, that is, expense patterns for a 3-month period, are obtained for food and other selected items, accounting for an additional 20 to 25 percent of total expenditures." (See *Consumer Expenditure Survey, 1994–95* Bulletin 2492 (Bureau of Labor Statistics, December 1997), p. 256.

[11] At least, this is true since 1988. Prior to that time, respondents were asked about their average *monthly* expenditures for groceries.

[12] Details on the integration methodology are found in *Consumer Expenditure Survey, 1994–95* Bulletin 2492 (Bureau of Labor Statistics, December 1997), pp. 256-57.

[13] To be precise, of every $6.85 consumers spend, $1 comes from a family in which the reference person is at least 65 years old.

[14] Shelter consists of payments for owned and rented primary dwellings, including utilities. Utilities are counted because some consumers have these payments included with shelter payments and cannot separate them out.

[15] Gregory Acs and John Sabelhaus, "Trends in out-of-pocket spending on health care, 1980-92," *Monthly Labor Review*, December 1995, pp. 35–45; quote from p. 37.

[16] The Consumer Expenditure Survey collects information only on out-of-pocket health care expenditures. Although these include health insurance premium payments, any payments made by the insurance company directly to the health care provider are not counted in these figures.

[17] Using total expenditures as a proxy for permanent income is done for theoretical and empirical reasons. From theory, Milton Friedman's "permanent income hypothesis" suggests that consumers make expenditure decisions based not only on their current income, but also on expectations of future income. Empirically, the alternative is to use reported income as a variable. However, respondents do not always report information on income, and even those who do may not provide a full accounting of all income from all sources. Furthermore, expenditure decisions may be based in part on changes in assets and liabilities, which are collected only on a limited basis in the Interview survey.

In addition, other authors mentioned in this study use permanent income in some form in their analyses. Abdel-Ghany and Sharpe use total expenditures directly, as is done herein. Rubin and Nieswiadomy use a regression to estimate permanent income. Specifically, they regress total expenditures on characteristics such as current income and financial assets. They use the natural logarithm of the predicted value for total expenditures as a proxy for permanent income. Because Rubin and Nieswiadomy's method would reduce the sample for study to those families for which income and asset data are available, the approach used by Abdel-Ghany and Sharpe is preferred in this case.

For more information on permanent income and the "permanent income hypothesis," see Friedman, *A Theory of the Consumption Function* (Princeton, NJ, Princeton University Press, 1957).

[18] See, for example, Geoffrey D. Paulin, "A Comparison of Consumer Expenditures by Housing Tenure," *Journal of Consumer Affairs*, summer 1995, pp. 164–98.

[19] See table 2 for the percentage of the sample that reports specific expenditures.

[20] For details, see John F. McDonald and Robert A. Moffitt, "The Uses of Tobit Analysis," *Review of Economics and Statistics*, vol. 62, no. 2, 318–21.

[21] It is possible, then, that some expenditures reported in 1984 actually occurred in 1983, and some reported in 1997 actually occurred in 1996. For example, a person interviewed in January would report expenditures for the previous October, November, and December; a person interviewed in February would report expenditures for November, December, and January; and so forth.

[22] Probabilities are derived from results presented in table 4. In probit results, a positive coefficient indicates a higher probability of an event, given the associated characteristic, and a negative coefficient indicates a lower probability of an event occurring. Similarly, the larger the magnitude of the coefficient, the more (or less) likely is the event (depending on the sign of the coefficient). Unfortunately, beyond this, probit parameter estimates are not easily interpreted. They must be incorporated into a conventional regression equation (that is, a predicted value is obtained on the basis of parameter estimates and characteristics of the family under study), the results of which provide a value for the "cumulative density function," or CDF. It is then usually necessary to consult a standard table of values for the CDF to find the probability of an event occurring that is associated with the function's predicted value.

For more details on the probit model, including an applied example, see William H. Greene, *Econometric Analysis*, 2nd ed. (New York, NY, Macmillan Publishing Co., 1993), chapter 21, esp. pp.635–41.

[23] At least, not at the 95-percent confidence level; it *is* significant at the 90-percent level, however.

[24] In each of these cases, the parameter estimate for 1984 is statistically significant, with 1997 showing no significant difference.

Spending patterns of public-assisted families

Families receiving public assistance are demographically heterogeneous, as are their spending patterns; the greater the number of assistance programs they receive, the more they allocate their budget share toward basic necessities

Lucilla Tan

Families receiving public assistance differ from other families not only demographically, but also in the way they spend. Expenditures on basic needs account for a larger share of the assisted families' spending. Furthermore, when the assisted families are classified by the number of public assistance programs received (such as medicaid, food stamps, and subsidized housing), the data indicate that such families are not homogeneous—their demographics are different, as are their spending patterns.

This article summarizes the demographic characteristics and expenditure patterns of families receiving public assistance. The results are based on responses to the Interview survey component of the Bureau of Labor Statistics Consumer Expenditure Survey, conducted in 1998.[1]

Federal, State, and local governments provide a variety of assistance programs to low-income families. The Consumer Expenditure Survey collects data on out-of-pocket expenditures of persons by family, as well as their demographic characteristics—including whether the family receives some types of public assistance.[2] For the purpose of this article, a family is classified as an *assisted family* if it reported receiving at least one of the following six types of public assistance: supplementary security income (SSI), welfare, medicaid, food stamps, government housing subsidies, or public housing.[3]

Types of assistance

Of the 84.5 million noninstitutional civilian families in the United States, assisted families made up 14 percent in 1998.[4] Which single type of assistance was most frequently received? As the following tabulation shows, medicaid is, by far, the most widely used type of assistance. (These percentages add up to more than 100 percent because some families receive more than one type of assistance.)

Type of assistance	*Used by percentage of assisted familes*
Medicaid	68.4
Food stamps	40.2
Supplementary security income	31.9
Welfare	21.4
Government housing subsidies	18.2
Public housing	12.0

A closer look at assisted families is made by disaggregating the assisted families based on the number of assistance programs received. Of the assisted families, 47 percent received one type of assistance; 25 percent, two types; 17 percent, three types; 10 percent, four types; and 1 per-

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cent, five types. (No family received all six types of assistance because the housing assistance was either in the form of public housing or housing subsidies.) The *dominant assistance combination* is the type of support mix that occurs most frequently for that group of assisted families. (See table 1.) Regardless of the number of types of assistance received, medicaid appears in every dominant assistance combination. In the case of families that receive only one type of assistance, 44 percent receive medicaid. For families with three types of assistance, both medicaid and food stamps were received by 58 percent of the families, with either welfare or supplementary security income constituting the third type of assistance. For families with four types of assistance, housing assistance joins medicaid and food stamps for almost 60 percent of these families, with either welfare or supplementary security income as the fourth type of assistance.

The number of families in the group receiving five types of assistance is too small to be representative, in this case, and is thus combined with the group of families receiving four types of assistance in the discussion that follows.

Demographic characteristics

Compared with nonassisted families, assisted families on average are slightly larger in size (2.9 persons, compared with 2.4 persons for nonassisted families), have more children under age 18 (1.1 persons, compared with 0.6 persons for nonassisted families), but have the same number of persons age 65 and older (0.3 persons).[5] (See table 2.)

The reference person of assisted families is, on average, 47.9 years old, very close to the average age of 47.7 years for the reference person of nonassisted families.[6] However, among assisted families, the average age of the reference person for families receiving three or more types of assistance is 43.5, compared with persons age 49.4 for assisted families receiving less than three types of assistance.

Among the assisted families, those receiving more types of assistance tend to have more children under age 18 and fewer persons older than age 65.

Assisted families have a lower average number of wage earners (1.0 persons) than nonassisted families (1.4 persons), and among assisted families, the average number of wage earners declines as the number of assistance programs received increases.

Geographically, the highest concentration of assisted families is in the South, regardless of the number of assistance programs received.

Race. Of all nonassisted families, about 88 percent of the reference persons are white, 8 percent are black, 3 percent Asian/ Pacific Islander, and 1 percent American Indian/Aleut/Eskimo. The racial proportions for reference persons in assisted families are 70 percent white, 26 percent black, 2 percent Asian/ Pacific Islander, and 3 percent American Indian/ Aleut/Eskimo. Among assisted families, as the number of assistance programs increases, the proportion of white reference persons declines, while the proportion of black reference persons increases.

Homeownership. About 68 percent of persons who do not receive assistance are homeowners, of whom almost two-thirds are paying off a mortgage. In comparison about 35 percent of persons who do receive assistance are homeowners, of whom about half are paying off a mortgage. Among assisted families, the proportion consisting of homeowners declines and the proportion consisting of renters increases as the number of assistance items received increases.

Educational attainment. The Consumer Expenditure Survey also provides data on the maximum level of education attained by the family's reference person. Of the nonassisted families, about 28 percent have a bachelor's degree or higher, about one-third have an associate's degree, or attended college (but did not graduate or have not graduated), and about 36 percent attended high school, of whom more than three-quarters graduated. Of the assisted families, about 7 percent have a bachelor's degree or higher, about one-fifth have an associate's degree, or attended college (but did not or have not graduated), and about 54 percent have attended high school, of whom, slightly more than half graduated.

Table 1. Most frequently used combinations of assistance programs, Consumer Expenditure Survey ,1998

Number of assistance programs received	Assistance program combination	Percentage of assisted families with the combination
1	Medicaid	44
	Supplemental Security Income	16
2	Medicaid, supplementary income	33
	Medicaid, food stamps	31
3	Medicaid, food stamps, welfare	33
	Medicaid, food stamps, supplementary income	25
4	Medicaid, food stamps, supplementary income, and housing assistance (housing subsidy or live in public housing)	32
	Medicaid, food stamps, welfare, and housing assistance (housing subsidy or live in public housing)	27
5	Medicaid, food stamps, welfare, supplementary income, and housing assistance (housing	

Table 2. Demographic characteristics of complete income reporting families, by assistance status and by number of assistance programs received, Consumer Expenditure Survey, 1998

Characteristic	All families	Nonassisted families	Assisted families	Assisted families by number of assistance programs			
				1	2	3	4 or 5
Number of families in the sample	17,619	15,207	2,412	1,143	600	409	260
Family weight (U.S population)	84,496,784	72,906,610	11,590,174	5,554,086	2,920,720	1,925,762	1,189,606
Age of reference person	47.7	47.7	47.9	49.4	49.3	45.2	41.7
Average number in family							
Family size	2.5	2.4	2.9	2.9	3.0	2.7	3.1
Number of earners	1.3	1.4	1.0	1.2	0.9	0.6	0.4
Children under age 18	.7	.6	1.1	1.0	1.0	1.2	1.7
Persons age 65 and older	.3	.3	.3	.4	.3	.2	.1
Vehicles	1.9	2.0	1.2	1.6	1.2	.7	.6
Percent distribution							
Race (reference person):							
White	85.3	87.9	69.5	74.9	69.3	64.5	53.4
Black	10.6	8.1	26.0	21.7	25.5	31.2	39.0
American Indian, Aleut, Eskimo	1.0	.8	1.9	1.3	3.6	1.4	1.4
Asian, Pacific Islander	3.9	3.2	2.6	2.1	1.7	3.0	6.3
Gender (reference person):							
Male	58.1	61.1	39.1	47.4	39.0	27.9	18.5
Female	41.9	38.9	60.9	52.6	61.0	72.1	81.5
Housing status:							
Homeowner	63.9	68.4	35.3	46.0	39.1	16.5	5.9
With mortgage	39.0	42.2	19.0	25.3	20.8	8.4	1.9
Without mortgage	24.9	26.2	16.3	20.7	18.4	8.1	4.0
Renter	32.3	27.8	60.5	50.6	57.4	78.7	85.0
Other	3.8	3.8	4.2	3.4	3.4	4.8	9.1
Family structure:							
Husband and wife only	21.3	23.6	6.8	9.2	5.8	3.7	3.4
Dual parent with children	30.7	31.3	26.4	33.7	24.9	16.9	11.3
Single parent with children	6.1	4.5	16.6	10.2	12.3	27.5	39.1
Single	29.5	29.8	27.5	26.0	26.8	31.9	29.0
Other	12.4	10.8	22.7	20.9	30.2	20.1	17.2
Educational attainment (reference person):							
None	.4	.2	1.6	1.3	2.0	1.6	2.4
Elementary	7.0	5.3	17.5	16.4	20.4	17.3	15.6
High school, nongraduate	10.0	7.9	22.9	17.4	24.6	26.9	38.0
High school, graduate	28.3	27.9	31.2	32.1	30.8	34.8	22.4
Associate's degree, or college without graduation	29.7	31.3	20.2	23.2	17.9	17.0	17.3
Bachelor's degree or higher	24.7	27.5	6.6	9.6	4.4	2.4	4.5
Region:							
Northeast	18.9	18.9	19.1	18.3	16.5	21.2	25.4
Midwest	23.1	23.5	20.5	21.3	16.2	23.9	21.8
South	34.3	34.0	36.0	36.9	39.4	31.4	31.5
West	23.7	23.6	24.4	23.6	27.9	23.5	21.3

Family structure. Another distinction between nonassisted and assisted families is in composition. For instance, families consisting of a husband and wife only make up 24 percent of nonassisted families, compared with 7 percent of assisted families; and single parents with children make up 5 percent of nonassisted families, compared with 17 percent of assisted families. Among assisted families, the proportion of single-parent families increases more than twofold when the number of assistance items received is four or more, compared with families that receive less than three types of assistance. Conversely, the proportion of dual-parent families generally falls as the number of assistance items received increases, from 34 percent for families receiving one type of assistance to 11 percent for families receiving four or more types of assistance. Single-parent families make up 6.1 percent of all families. Of these single-parent families, 38 percent receive assistance. Also, those families have more members and more children under age 18, compared with nonassisted single-parent families. (See chart 1.) None of the single-parent families has members aged 65 or older. About 83 percent of the reference

Chart 1. Demographic characteristics of single-parent families, by assistance status and number of assistance programs received, 1998

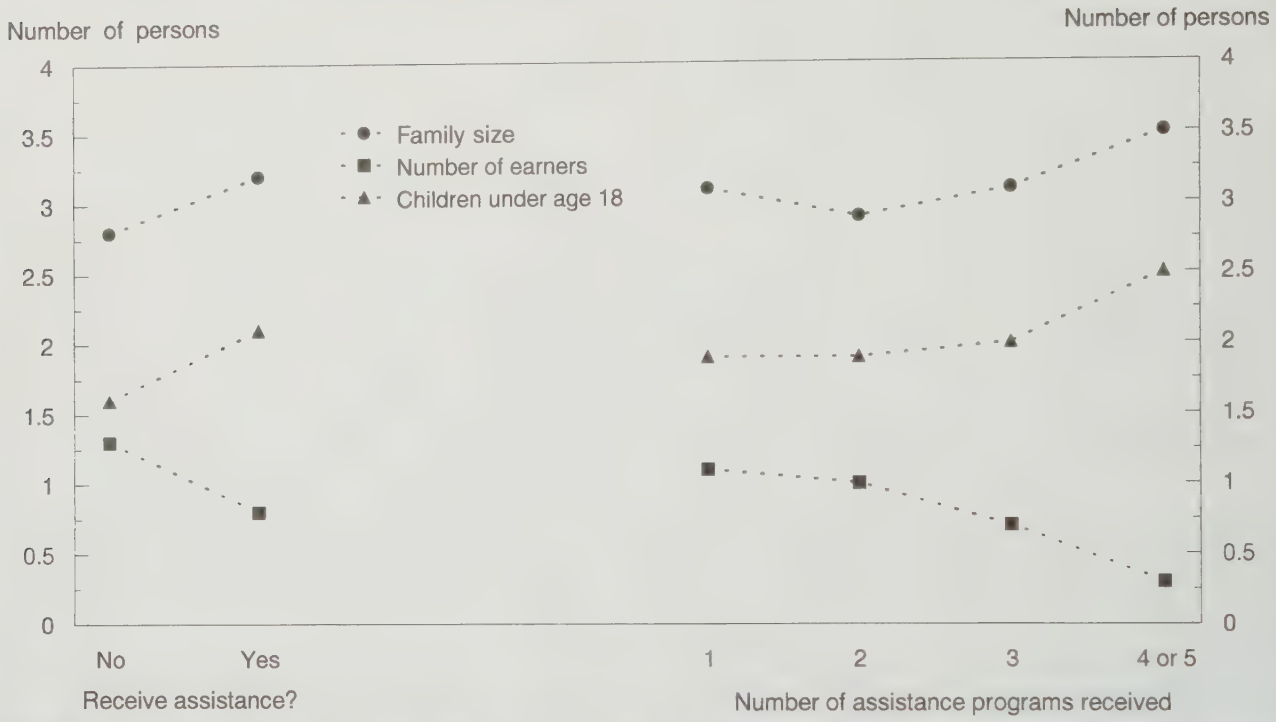
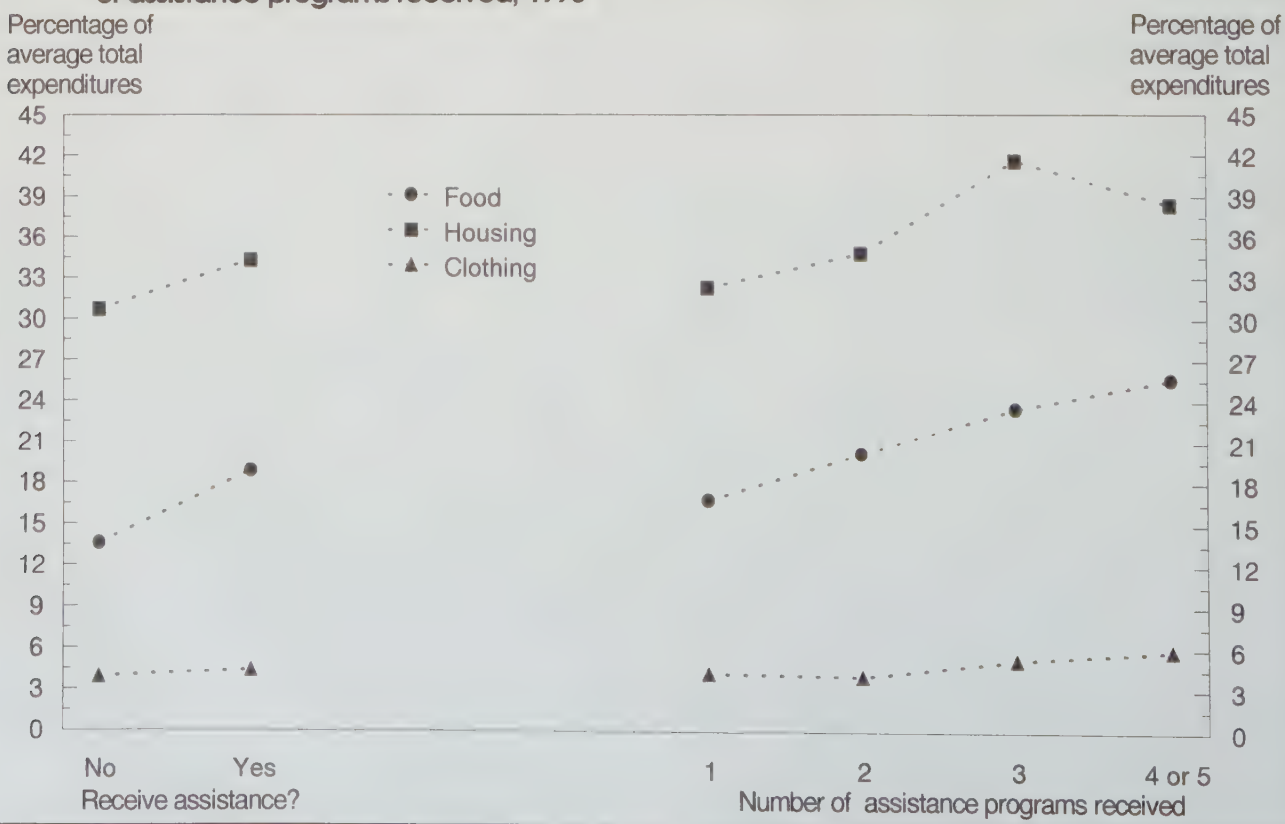


Chart 2. Expenditure shares on basic necessities by family assistance status and number of assistance programs received, 1998



persons of single-parent nonassisted families are women, 74 percent are white and 21 percent are black. In contrast, 96 percent of the reference persons of single-parent assisted families are women, 52 percent are white, and 46 percent are black. The proportion of single parents who are high school graduates living in nonassisted families is 25 percent, compared with 27 percent for assisted families. However, while 28 percent of the reference persons of single-parent nonassisted families have at least a bachelor's degree and 34 percent have attended some college or have an associate's degree, the proportions for single-parent assisted families are lower, at 5 percent with some college and 19 percent with an associate's degree.

Expenditure allocations

For assisted families, average total expenditures and income before taxes decline as the number of assistance programs received increases. One method to compare family expenditure patterns is to calculate *budget shares;* the average expenditures for a major expense category as a share of average total expenditures. (See table 3.) For both assisted and nonassisted families, the largest budget shares are allocated to housing, transportation, and food, respectively. These three expenditure categories together make up 63 percent of average total expenditures for nonassisted families, compared with 72 percent, for assisted families. Nonassisted families allocate budget shares to education at 1.6 percent, and personal insurance and pensions at 12 percent, which are about two times greater than the allocated budget shares of assisted families. On entertainment, the budget share for nonassisted families is 5.1 percent, compared with 4.2 percent for assisted families. Unlike food, housing, and clothing budget shares, the health budget share decreases as the number of assistance programs increases, from 5.1 percent for families with one type of assistance to 1.9 percent for families with four or more types of assistance. In contrast, the health budget share for nonassisted families is 5.2 percent. The lower out-of-pocket health expenditure by poorer families might be reflective of medicaid assistance, or these families are spending less on preventive care, or both.

Basic needs. Food, housing, and clothing are basic living needs, and therefore are expected to take up a larger share of a poorer family's expenditure budget. This is reflected in the data—the expenditure budget allocations for each of these expense categories is higher for assisted families than for nonassisted families, and in general, the budget allocations increase for assisted families as the number of assistance programs increases. (See chart 2.) Overall, for families with three or more types of assistance programs, the average annual expenditure on food, housing, and clothing make up 70 percent of average total expenditures, compared with 53 percent for families with one type of assistance, and 48 percent for nonassisted families.

Food. For assisted families, the food budget share is 19 percent, or an annual mean expenditure of $3,799 (±$80 standard error), compared with 14 percent, or an annual mean expenditure of $5,085 (±$55 standard error) for nonassisted families. (See tables 3 and 4.) Within the class of assisted families, the food budget share is higher for poorer assisted families: 17 percent for families with one type of assistance, compared with 26 percent for families with four or more types of assistance. Although the food budget share increases with the number of assistance programs received, the annual mean food expenditure per family member declines–from $1,423 for families receiving one type of assistance to $1,041 for families receiving four or five types of assistance.[7] In contrast, nonassisted families spend an

Table 3. Allocation of annual average total expenditure by assistance status and by number of assistance programs received, Consumer Expenditure Survey, 1998

Budget item	All families	Nonassisted families	Assisted families	Assisted families by number of assistance programs received			
				1	2	3	4 or 5
Average total expenditure	$35,042	$37,420	$20,085	$24,599	$18,577	$13,968	$12,620
Income before taxes	41,150	44,658	19,085	24,760	16,609	12,022	10,109
Budget shares (percent of average total expenditures):							
Food	14.0	13.6	18.9	16.8	20.2	23.5	25.6
Housing	30.9	30.7	34.3	32.3	34.8	41.6	38.4
Transportation	19.0	19.0	18.9	20.7	18.7	11.5	16.4
Clothing	3.9	3.9	4.4	4.2	4.0	5.2	5.9
Health	5.2	5.2	4.6	5.1	4.8	3.2	1.9
Education	1.6	1.6	.8	1.1	.5	.3	.7
Entertainment	5.0	5.1	4.2	4.3	3.8	4.1	4.2
Personal insurance and pensions	11.6	12.0	6.7	8.0	6.5	3.3	1.8
All other expenditures	8.9	9.0	7.2	7.6	6.7	7.3	5.2

Table 4. Expenditure on basic living needs, by assistance status and number of assistance programs received, Consumer Expenditure Survey, 1998

Basic living needs	All families	Nonassisted families	Assisted families	Assisted families by number of assistance programs received			
				1	2	3	4 or 5
Food:							
Annual mean expenditure	$4,909	$5,085	$3,799	$4,127	$3,751	$3,279	$3,226
Standard error	49	55	80	127	130	160	206
Housing:							
Annual mean expenditure	10,844	11,471	6,897	7,945	6,457	5,807	4,846
Standard error	148	157	202	290	266	244	324
Clothing:							
Annual mean expenditure	1,377	1,456	879	1,032	747	724	744
Standard error	29	31	43	62	69	127	72

annual average of $2,119 per family member on food.

Housing. The housing budget share for assisted families is 34 percent, or an annual mean expenditure of $6,897 (±$202 standard error), compared with 30 percent, or an annual mean expenditure of $11,471 (±$157 standard error) for nonassisted families. Like the food budget share, the housing budget share for assisted families also increased with the number of assistance programs received, except for those families with at least four types of assistance; such families have a lower housing expenditure share than do families with three types of assistance. This might be attributed to the larger proportion of families with four or more types of assistance receiving housing assistance than the group of families with three types of assistance. (See table 1.)

Clothing. Both assisted and nonassisted families' clothing budget share is about 4 percent. This translates to an annual mean expenditure of $879 (± $43 standard error) for assisted families and $1,456 (±$31 standard error) for nonassisted families. A look at families by size reveals that nonassisted families spend an annual mean of $602 per family member on clothing—two times more than do assisted families. Like the food budget share, the clothing budget share increases with the number of assistance programs received, but the annual mean clothing expenditure per family member declines.

IN SUMMARY, assisted families are not a homogeneous group. Those receiving four or more types of assistance, on average, have the most number of members and children under 18, and are most likely headed by a female single parent who did not or has not graduated from high school, and who most likely live in rented quarters. In terms of spending, assisted families spend a larger share of their budget on basic necessities. As the number of assistance items increases, the average annual expenditure on basic living needs—food, housing, and clothing—takes up a larger share of average total expenditures. □

Notes

ACKNOWLEDGMENT: The author gratefully acknowledges comments from John Rogers, Geoffrey Paulin, and Steve Henderson, and programming guidance from Richard Dietz.

[1] Data presented in this study are for *complete income reporting consumer units* interviewed from January through December 1998. Due to the 3-month reference period of the quarterly Interview component of the Consumer Expenditure Survey, the data for this article include data for October 1997 through November 1998; this effectively constitutes 12 months of data due to the rotating sample design of the survey.

Complete income reporters are respondents who have provided values for major sources of income, such as wages and salaries, self-employment income, and Social Security income. Even complete income reporters may not have provided a full accounting of all income from all sources. In the current survey, across-the-board zero income reporting was designated as invalid, and the consumer unit was categorized as an incomplete reporter.

A *consumer unit* includes: 1) members of a household related by blood, marriage, adoption or other legal arrangement; 2) a person living alone or sharing a household with others but who is responsible for at least two of the following three major types of expenses—food, housing, and other expenses; or 3) two or more persons living together who pool their income to make joint expenditure decisions.

[2] For this article, a family refers to the term, *consumer unit*, which is the unit of analysis in the Consumer Expenditure Survey.

[3] Supplemental security income refers to assistance payments to low-income aged, blind or disabled persons; the requirements vary by State. Welfare assistance includes payments under various assistance programs, such as emergency assistance, general assistance, and Cuban Refugee Assistance. The Consumer Expenditure Survey asks for the total value expended on food; the survey does not distinguish if any part of that food expenditure was paid for with food stamps.

[4] In comparison, data from the 1993 panel of the Survey of Income and Program Participation (SIPP), which covers the period October 1992 to December 1995, showed that in each month of 1994, about 15.2 percent of the U.S. civilian population, on average, participated in one or more of the following assistance programs: Aid to families with dependent children (AFDC), general assistance (GA), food stamps, Supplemental security income (SSI), medicaid, and housing assistance. See *Dynamics of Economic Well-*

Being: Program Participation, Who Gets Assistance?, *Current Population Reports*, P70–69 (U.S. Department of Commerce, Bureau of the Census, Household Economic Studies, August 1999).

[6] A reference person is the first member mentioned by the respondent when asked to "start with the name of the person or one of the persons who owns or rents the home." It is with respect to this person that the relationship of the other consumer unit members is determined.

[7] The annual mean expenditure per family member group of an expense category is calculated as the annual mean expenditure for the expense category (See table 4.) divided by the average family size. (See table 2.)

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Let's do lunch: expenditures on meals away from home

Lunch is the most frequently purchased meal away from home: income, age, and ethnicity are among the most important predictors of the probability of eating out; however, regardless of meal purchased, family type is a less important predictor

Geoffrey D. Paulin

The restaurant business is clearly one of the most important industries in the United States today, regardless of the economic measure used. For example, in 1995, nearly one-third (31) percent of all employees in retail trade worked for eating places (restaurants, lunchrooms, cafeterias, and refreshment places).[1] More recently, in 1997, retail sales from eating places amounted to $222.0 billion, or nearly 9 percent of total retail trade ($2,566.2 billion). The figure is all the more impressive when compared with total nondurable goods sales ($1,508 billion). More than $1 in every $7 spent on nondurable goods in 1997 went to eating places.[2] According to the Bureau of Labor Statistics Consumer Expenditure Survey,[3] more than 71 percent of all "consumer units" (or families)[4] reported buying meals at restaurants, carryouts, and other eating establishments during an average week in 1997.[5] The average annual expenditure was about $1,477 per family,[6] or nearly 31 percent ($4,801) of total expenditures for food.[7]

Changes in family income, number of earners, age of reference person, and other demographic factors will undoubtedly influence future spending for meals away from home.[8] To understand and anticipate the effects of these potential changes, it is important to analyze not only the types of consumers who are purchasing these meals away from home, but also the types of meals they are purchasing. This article examines expenditures for meals away from home for several demographic groups using data from the Consumer Expenditure Survey. In addition to family characteristics, this survey collects data on four categories of meals purchased from restaurants, carry-outs, and other eating establishments (henceforth referred to as "meals away from home," or "eating out"). These categories are: breakfast and brunch; lunch; dinner; and snacks and nonalcoholic beverages.

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Preliminary analysis

Although breakfast is often called "the most important meal of the day," this does not appear to be true in terms of expenditures for meals away from home. The following tabulation shows expenditures and percent of families reporting meals away from home (data are from the Consumer Expenditure Survey, 1997):

	Percent of families	*Average weekly expenditure*
Total meals at restaurants, carry-outs, and other	71.4	$28.41
Breakfast and brunch	28.2	2.22
Lunch	60.7	9.65
Dinner	55.1	14.2
Snacks and nonalcoholic beverages	45.6	2.30

On the one hand, the data show average weekly expenditures for breakfast and brunch away from home ($2.22) are even smaller than those reported for snacks and nonalcoholic beverages away from home ($2.30).[9] Breakfast and brunch expenditures also occur far less frequently. Only 28 percent of all families report expenditures for breakfast and brunch away from home each week, compared with 46 percent that report expenditures for snacks and nonalcoholic beverages away from home. However, based on the differences in average expenditure and the percent of families reporting, it would appear the average expenditure for breakfast and brunch, when it does occur, is much larger than the average for snacks and nonalcoholic beverages. Although expenditures for dinner ($14.24) are larger on average than expenditures for lunch ($9.65), more families report expenditures for lunch (61 percent) than for dinner (55 percent).

On the other hand, the overall percentage provides only limited information. Table 1 clearly shows that expenditures for eating out are related to a family's demographic characteristics. Not surprisingly, of those groups examined, the families most likely to purchase meals away from home are those in the highest income quintile. More than 8 in 10 of these families report expenditures for meals away from home. The second most likely purchasers are families with multiple earners. Nearly 8 in 10 of all families with two or more earners report such an expenditure. Both high-income families and multiple-earner families purchase the lunch meal most frequently. There is a relationship between number of earners and income (ranging from 0.7 earner per family in the lowest quintile to 2.1 earners per family in the highest quintile).[10] Both of these effects influence the probability of purchasing lunch away from home. The higher income makes the purchase more affordable. This may also be the result of the earners going out to lunch during the workday, rather than bringing food from home to the workplace. Both high-income and multiple-earner families are also more likely to purchase dinner away from home than are any of the other groups. This may be for convenience: if several members of the family work, then there is less likely to be someone available to prepare food at home. Similarly, single earners are more likely to eat out than are single nonearners, but this may also be due to an income effect, given that single earners presumably have higher incomes than single nonearners. (A nonearner is a person who draws an income from interest, dividends, or other nonlabor, nonretirement sources.) It should also be noted that families consisting of a husband, wife, and their own children only, have patterns that are very similar to the multiple-earner families.[11] This is not surprising, considering that the average family of this type has 2.1 earners and is also near the top end of the fourth income quintile. Again, this makes it difficult to say whether their higher probability of eating out is an income effect, an earner effect, or another type of effect. For example, convenience may be a factor if there are several meals to prepare. Also, there is more likelihood of scheduling conflicts as the family gets larger, and perhaps one or more of the members occasionally chooses to "grab a bite somewhere," rather than waiting to eat with the rest of the family.

The frequency of purchasing meals away from home also appears to be related to age. While 3 of 4 families in which the reference person is under age 65 report an expenditure for eating out, fewer than 2 of 3 families with a reference person 65 to 74 years old report such an expenditure, and approximately half of those with a reference person at least 75 years old report such an expenditure.[12] Lunch is the most frequently reported meal away from home for each age group, followed by dinner. For the group aged 65 to 74, there is a much smaller difference (about 2 percent) in frequency of reporting these meals than for the other groups. Reports of breakfast and brunch occur less frequently than reports of snacks and nonalcoholic beverages for all age groups, but especially for the under-65 age group. Only 30 percent of those under age 65 report expenditures for breakfast and brunch away from home, compared with 50 percent reporting snacks and nonalcoholic beverages.

Meals away from home account for a substantial share of total food expenditures, regardless of the demographic group examined. For the groups studied in this report, the share ranges from 23 percent (for families with two or more persons, but no earners) to 41 percent (for a single-person who is an earner). As might be expected, snacks and nonalcoholic beverages constitute the category of meals away from home that accounts for the smallest share of total food expenditures, ranging from about 1 to 4 percent for each group examined. Perhaps more surprising is that the category of breakfast and brunch away from home amounts to a similar share of total food expenditures, ranging from 2 to 3 percent of total food expenditures. Dinner away from home accounts for the largest share of total food expenditures for each group examined, ranging from 12 to 21 percent of total food expenditures.

The share of total food expenditure allocated to meals away from home rises with income. On average, the first quintile allocates fewer than 1 in 4 food dollars to meals away from home, while the fifth quintile allocates more than 1 in 3 food dollars to meals away from home. The share declines by age group, with the group under 65 allocating 31 percent of its food dollars to meals away from home, compared with 26 percent for the 75-and-older age group. It is also interesting to note that single persons allocate a larger share of total food expenditures to meals away from home (37 percent) than any other family type. By contrast, single parents and "other" husband and wife families[13] each allocate about 26 percent of their total food dollars to meals away from home. Also, the relationship of shares to number of earners warrants mention. For most cases, the share increases with number of earners. For example, single earners allocate 41 percent of their food dollars to meals away from home, compared with 26 percent

Table 1. Average weekly expenditures, percent reporting, and shares of total food expenditures for meals away from home, Consumer Expenditure Survey, 1997

[Standard error of mean in parentheses]

Characteristic	Average weekly expenditure						Percent reporting					Share of total food expenditure (percent)				
	Total food[1]	Meals away from home	Breakfast and brunch	Lunch	Dinner	Snacks and nonalcoholic beverages	Meal away from home	Breakfast and brunch	Lunch	Dinner	Snacks and nonalcoholic beverages	Meals away from home	Breakfast and brunch	Lunch	Dinner	Snacks and nonalcoholic beverages
All consumer units	$92.33	$28.41	$2.22	$9.65	$14.24	$2.30	71.4	28.2	60.7	55.1	45.6	30.8	2.4	10.5	15.4	2.5
	–	(.50)	(.10)	(.18)	(.30)	(.06)										
Income quintile[2]																
First	51.64	12.43	0.87	3.86	6.57	1.12	54.7	17.1	43.0	40.0	31.5	24.1	1.7	7.5	12.7	2.2
	–	(.82)	(.11)	(.24)	(.53)	(.10)										
Second	71.72	18.41	1.58	6.62	8.60	1.61	66.0	25.2	53.6	46.8	39.5	25.7	2.2	9.2	12.0	2.2
	–	(.91)	(.18)	(.35)	(.61)	(.13)										
Third	86.73	25.70	2.25	8.96	12.22	2.27	78.8	30.6	66.4	59.3	51.5	29.6	2.6	10.3	14.1	2.6
	–	(1.07)	(.22)	(.42)	(.65)	(.17)										
Fourth	109.23	37.14	3.08	12.39	18.52	3.16	85.4	34.9	74.5	68.2	59.1	34.0	2.8	11.3	17.0	2.9
	–	(1.10)	(.26)	(.50)	(.81)	(.18)										
Fifth	151.93	52.11	3.41	17.96	26.51	4.24	87.7	37.3	80.1	73.9	62.0	34.3	2.2	11.8	17.4	2.8
	–	(1.24)	(.20)	(.52)	(.87)	(.19)										
Number of earners																
Single consumers																
No earner	41.64	10.95	.94	3.65	5.91	.44	49.1	15.7	36.8	31.2	19.9	26.3	2.3	8.8	14.2	1.1
	–	(.96)	(.17)	(.33)	(.65)	(.05)										
One earner	54.18	22.23	1.77	7.14	11.29	2.04	71.2	25.9	59.2	55.3	44.1	41.0	3.3	13.2	20.8	3.8
	–	(.87)	(.17)	(.31)	(.56)	(.17)										
Households of two or more persons																
No earner	$81.57	18.80	1.81	5.91	10.24	085	57.3	20.3	46.0	42.2	28.9	23.0	2.2	7.2	12.6	1.0
	–	(1.62)	(.39)	(.43)	(1.01)	(.12)										
One earner	97.70	25.88	2.14	8.36	13.32	2.05	69.7	27.3	58.6	53.9	44.4	26.5	2.2	8.6	13.6	2.1
	–	(1.11)	(.16)	(.37)	(.72)	(.14)										
Two earners	111.70	36.00	2.61	12.39	17.94	3.06	79.6	32.3	69.3	62.8	54.5	32.2	2.3	11.1	16.1	2.7
	–	(.88)	(.14)	(.38)	(.54)	(.11)										
Three or more earners	140.75	41.71	3.35	15.48	19.43	3.45	79.4	37.6	71.8	63.3	57.3	29.6	2.4	11.0	13.8	2.5
	–	(1.91)	(.31)	(.74)	(1.18)	(.33)										
Age of reference person																
Under 65[3]	98.90	30.95	2.32	10.56	15.37	2.70	75.0	30.2	64.5	58.9	50.5	31.3	2.3	10.7	15.5	2.7
	–	(.55)	(.09)	(.22)	(.32)	(.08)										
65 to 74	78.20	22.64	2.38	6.83	12.41	1.02	61.6	25.0	49.9	47.3	32.9	29.0	3.0	8.7	15.9	1.3
	–	(1.43)	(.33)	(.43)	(.92)	(.08)										
75 and older	53.58	13.87	1.21	5.35	6.87	.44	52.6	15.1	41.3	32.3	19.7	25.9	2.3	10.0	12.8	0.8
	–	(1.11)	(.23)	(.44)	(.73)	(.06)										
Family type																
Single person	49.59	18.19	1.47	5.89	9.36	1.47	63.3	22.2	51.2	46.7	35.4	36.7	3.0	11.9	18.9	3.0
	–	(.68)	(.13)	(.26)	(.42)	(.11)										
Husband and wife only	101.26	31.35	2.56	9.90	16.89	2.02	74.2	28.5	61.9	58.1	45.1	31.0	2.5	9.8	16.7	2.0
	–	(1.09)	(.20)	(.32)	(.80)	(.12)										
Husband and wife with children	127.58	37.24	2.76	13.38	17.69	3.41	79.1	33.3	70.1	62.7	55.7	29.2	2.2	10.5	13.9	2.7
	–	(1.10)	(.17)	(.47)	(.64)	(.15)										
Other husband and wife consumer units	135.21	35.53	2.73	12.79	16.75	3.26	72.7	30.7	64.2	58.2	52.9	26.3	2.0	9.5	12.4	2.4
	–	(2.54)	(.49)	(1.13)	(1.52)	(.45)										
Single parent	77.98	20.43	1.88	7.13	9.45	1.62	69.1	28.0	58.2	50.6	44.7	26.2	2.4	9.1	12.1	2.1
	–	(1.74)	(.38)	(.67)	(1.02)	(.31)										

[1] Average weekly expenditure is derived by dividing average annual expenditure (from integrated results) by 52 (for weeks per year).

[2] Complete reporters only.

[3] Percent reporting is calculated from data results. (Multiply percent reporting for all consumer units (cus) by number of cus, then do same for over 65 age group, subtract total over 65 reports, then divide by total cus under 65.)

NOTE: Dash indicates data are not available.

for single nonearners. Similarly, the percentage for families consisting of two or more persons increases from 23 percent for those with no earner to 32 percent for those with two earners. However, the share drops slightly—to 30 percent—for those with three or more earners. As noted earlier, the percent reporting meals away from home is nearly identical among multiple-earner families. It may be that those families with three or more earners are slightly more likely to eat at less expensive restaurants than are those with two earners.

Regression results

Thus far, the analysis has been limited to averages and frequency of reporting for selected groups. However, as noted, many characteristics, such as earners, income, and family size may be correlated to some extent; therefore, it is difficult to identify which characteristic is actually related to the probability of purchasing meals away from home. To address this issue, logistic regression analysis (logit) is used. This technique allows the analyst to ascertain how a change in characteristics is expected to affect the probability of purchasing meals away from home, *ceteris paribus*. The results of this technique are presented in table 2 (all meals away from home) and table 3, pages 42-43 (specific meals away from home).[14]

A few methodological issues must be addressed before describing the regression results. For example, although most of the previous data are obtained from the results of the integrated Consumer Expenditure Survey, the regressions are obtained from the Diary survey only. Unlike the previous results, the data used in the regressions are not weighted to reflect the population. When using Diary survey data in logistic regression, weighting often results in little change in parameter estimates, but a large reduction in standard errors, resulting in an increase in the statistical significance of parameter estimates.[15]

Nevertheless, there are many advantages to performing the logistic regressions. Not only can the relationships of specific demographics and probabilities of purchase be measured, *ceteris paribus*, but also several relationships can be tested at the same time. This allows for a much more informative analysis of the data than is possible by comparing averages for several groups. Furthermore, in some cases, more detail can be found in the logit results than is available using the publications format. For example, the data tables only describe expenditure patterns for single persons. However, with logit, one can analyze whether single men have different probabilities of purchasing certain meals away from home than do single women.

To perform the analysis, it is useful to describe a "control group" for which the probability of purchase can be calculated, and against which other groups can be compared. In this case, the control group consists of single men who are:

- earning incomes in the middle-income quintile;
- working primarily in positions for which a wage or salary is paid;
- under 65 years old;
- neither black nor Hispanic;
- high school graduates but who did not attend college; and
- homeowners with mortgages, residing in an urban area in the South.

According to table 2, such a person is quite likely to purchase at least one meal away from home each week, given that the probability of purchase is predicted to be nearly 80 percent for this group. However, a person who has otherwise similar characteristics, but earns a lower income, has a much lower probability of purchase—71 percent for members of the second-income quintile and 66 percent for the first-income quintile.

Apparently, though, whether the single man is currently earning an income has less of an effect than a change in income class. For a single-male nonearner in the middle-income quintile, the predicted probability of purchasing meals away from home drops from 80 percent (for the control group) to about 73 percent; in comparison, for a single-male earner in the second quintile, the predicted probability of purchase is less than 71 percent. However, this result should be interpreted with caution. Although both the "income" and "earner" effects are statistically significant, this only indicates that the probability of purchase for single men in the second quintile differs significantly from the probability for those in the middle quintile. Simultaneously, it indicates that the probability for single-male nonearners differs significantly from the probability for single-male earners. But it does not necessarily indicate that the probability for single-male *earners* in the *second* quintile is significantly different from single *nonearners* in the *third* quintile. However, the earner effect does appear to be less important than the income effect. Note that the probability of purchase for single nonearners includes the parameter estimate for "not working (other than retired)." This coefficient is negative, thereby lowering the predicted probability for nonearners, but it is not statistically significant. Because the income effect is statistically significant, and the predicted probability is lower for the second quintile even when the negative (but not statistically significant) "not working (other than retired)" coefficient is included, it seems reasonable to assume that the income effect dominates the earner effect.

As predicted from the preliminary results, age also plays a role in the probability of purchasing meals away from home. Single men aged 65 to 74 are about 6 percent less likely to purchase such meals than are single men under 65; single men aged 75 and older are about 9 percent less likely to purchase meals away from home.

Table 2. Results of logistic regression, all meals away from home, Diary Component, Consumer Expenditure Survey, 1997

Variable	Meals away from home			
	Parameter estimate	Standard error	Pr > chi-square	Probability (percent)
Intercept (control group):	1.3634	0.1063	0.0001	79.6
Income quintile:				
1st quintile	−.7215	.0814	.0001	65.5
2nd quintile	−.4731	.0776	.0001	70.9
4th quintile	.2114	.0887	.0171	82.8
5th quintile	.3234	.0946	.0006	84.4
Incomplete reporters	−.9315	.0712	.0001	60.6
Number of earners:				
No earners[1]	−.3848	.0980	.0001	72.5
Two earners[1]	.2886	.0691	.0001	82.7
Three or more earners[1]	.3354	.1139	.0032	79.7
Age of reference person:				
65 to 74	−.3130	.0803	.0001	74.1
75 and older	−.4890	.0908	.0001	70.6
Family type:				
Single woman	−.3079	.0807	.0001	74.2
Husband/wife only	−.0898	.0879	.3070	78.1
Husband/wife with own children[1]	−.2346	.1192	.0492	77.2
Other husband/wife[1]	−.2664	.1745	.1269	76.6
Single parent[1]	−.1781	.1362	.1909	78.2
Other families[1]	−.2565	.1430	.0728	76.8
Additional adults:[2]				
One adult	−.0938	.1058	.3749	73.8
Two adults	−.1800	.1514	.2342	72.1
Three or more adults	.3387	.2513	.1777	81.3
Number of children:[1,2]				
One child	.0907	.0923	.3256	77.2
Two children	.1919	.0988	.0521	78.9
Three or more children	.0687	.1212	.5710	76.8
Ethnic origin of reference person:				
Black	−.3909	.0739	.0001	72.6
Hispanic	−.3282	.0811	.0001	73.8
Education of reference person:				
Did not graduate high school	−.3528	.0650	.0001	73.3
Attended college	.2243	.0581	.0001	83.0
College graduate	.2923	.0626	.0001	84.0
Occupation category:				
Self-employed	−.0271	.0984	.7829	79.2
Retired[1]	.0608	.1065	.5682	73.9
Not working (other than retired)[1]	−.0069	.0972	.9433	72.5
Housing tenure:				
Owner, no mortgage	.2872	.0647	.0001	83.9
Renter	−.0242	.0567	.6689	79.2
Region of residence:				
Northeast	.0527	.0624	.3988	80.5
Midwest	.3368	.0609	.0001	84.6
West	−.1698	.0599	.0046	76.7
Degree urbanization:				
Rural	−.2362	.0714	.0009	75.5

[1] For explanation of how probability of purchase is calculated, see appendix.
[2] Probabilities calculated for husband and wife with own children only. Adding one adult in this case means that the child is 18 or older.

NOTE: For an explanation of "Pr > chi-square," see footnote 14.

Ethnicity is an important predictor of probability of purchase, with coefficients for black and Hispanic reference persons being negative and statistically significant. For each group, the probability of purchase is less than 74 percent, compared with nearly 80 percent for white and other reference persons.

Education also plays a statistically significant role, with the probability of purchasing meals away from home increasing from 73 percent for those who did not graduate high school to 84 percent for college graduates. In addition, the difference in predicted probability of purchase for owners with mortgages (79.2 percent) and renters (79.6 percent) is not statistically significant, but owners with no mortgage have a higher predicted probability of purchase (83.9 percent). This may be because, *ceteris paribus*, owners with no mortgage presumably have lower housing payments than owners with mortgages or renters, and, therefore, they have more income to allocate to meals away from home.

Region of residence also plays a role, with Westerners being least likely and Midwesterners being most likely to purchase meals away from home. Northeasterners are about as likely as Southerners to make these purchases. Similarly, degree of urbanization plays a role, with rural families less likely to purchase meals away from home. Restaurants may be fewer in number and less accessible in rural areas than urban areas.

Occupational status, however, plays little role in predicting the probability of purchasing meals away from home. None of the coefficients is statistically significant for occupation class. Similarly, family type does not appear to play a strong role in predicting purchases of meals away from home. Although single women are about 5 percent less likely to make these purchases, families consisting of a husband and wife only are quite similar to single men in their probability of purchase. And although the coefficient for a family consisting only of a husband and wife with their own children only is statistically significant, such families of three (two parents and one child under 18) are only slightly less likely (2 percent) than single men to purchase food away from home.

But what about specific meals? There may be different patterns by family type or other characteristics when type of meal away from home is examined. Indeed, dinner appears to be the meal away from home for which the probability of purchase varies most with family type. For families other than those composed of single men, predicted probabilities of purchase range from about 24 percent (single woman) to 30 percent (husband and wife only; or single parent with one child) for breakfast and brunch; from 62 percent (single woman) to 68 percent (single parent with one child) for lunch; and 46 percent (single woman) to 50 percent (husband and wife with one child) for snacks and beverages. However, the predicted probability of purchasing dinner away from home ranges from 53 percent (single woman) to 61 percent (husband and wife only). Single men have an even higher probability of purchasing dinner away from home (64 percent) and are much

more likely to purchase breakfast away from home (34 percent) than the other groups.

Ethnicity plays a major role in the probability of purchase of each of the meals. More than 1 in every 3 nonblack, non-Hispanic single men is predicted to purchase breakfast away from home, compared with more than 1 in 4 black and Hispanic single men. Similarly, the control group is much more likely to purchase lunch away from home (68 percent) than similar persons who are black (59 percent) or Hispanic (64 percent). Furthermore, while more than 5 of 8 control group members are predicted to purchase dinner away from home, only a little more than half of black or Hispanic single men are predicted to purchase dinner away from home. Members of the control group are also almost 10 percent more likely to purchase snacks and nonalcoholic beverages away from home (47.0 percent) than are blacks or Hispanics (37.5 percent).

Region of residence makes little difference in the probability of purchasing breakfast, with 1 in 3 single men predicted to purchase breakfast away from home, regardless of region. Similarly, the predicted probability of purchasing snacks and nonalcoholic beverages ranges only from 47 percent (South) to 52 percent (Midwest). However, Midwesterners have the highest predicted probabilities of purchase for both lunch (72 percent) and dinner (67 percent). Westerners have the lowest predicted probabilities of purchase for lunch (64 percent) and dinner (61 percent).

The relationship of education to probability of purchase is also interesting. Although the parameter estimates are statistically significant in each case except for breakfast and brunch for college graduates, the predicted probability for the control group (high school graduate) is much closer to those with higher education than those who did not graduate high school, regardless of the meal examined. Fewer than 3 in 10 single men who did not graduate high school are predicted to purchase breakfast and brunch away from home, compared with more than 1 in 3 for those who at least graduated high school. Similarly, 6 in 10 nongraduates are predicted to purchase lunch away from home, compared with between 68 and 73 percent of those who at least graduated high school. Only 56 percent of nongraduates are predicted to purchase dinner away from home, compared with 64 percent of high school graduates, 68 percent of those who attended college, and 71 percent of college graduates. Well under half (about 3 in 7) of the nongraduates are predicted to purchase snacks and nonalcoholic beverages away from home, compared with 47 percent to 52 percent of those who at least graduated high school.

Rural consumers are about 3 to 5 percent less likely than their urban counterparts to purchase specific meals away from home. This again may be due to a relative lack of restaurants of all kinds in rural areas, rather than to a lack of restaurants specializing in of one type of meal or another.

INCOME, AGE, AND ETHNICITY appear to be the most important factors in predicting probability of purchase of meals away from home, regardless of the type of meal. Surprisingly, family type appears to be of less importance, at least in probability of purchase. However, the share of total food expenditures allocated to meals away from home falls as family size increases. (Singles allocate about 37 percent of their food dollars to meals away from home, compared with 31 percent for husband/wife only families, and 29 percent for husband/wife and children families.) It is difficult to say whether this is due to a larger food-at-home budget in general, or whether larger families choose meals from less expensive restaurants (for example, "fast food," as opposed to "full service") when they do purchase meals away from home.

The category of breakfast and brunch is the least frequently purchased meal away from home, while lunch and dinner away from home are each of similar importance in the food budget. However, one should not be too quick to assume this means that Americans are skipping breakfast more frequently than other meals. They may be consuming something at home (or even taking a piece of fruit or a roll to work with them), or it may be that they are reporting "breakfast" foods under "snacks and nonalcoholic beverages." For example, would a morning doughnut or bagel and a cup of coffee be defined as breakfast or as a snack and nonalcoholic beverage? These and other issues warrant further investigation.

NOTES

[1] Data are from the *Statistical Abstract of the United States: 1998*, 118th ed. (U.S. Bureau of the Census, 1998), table 1276, "Retail Trade—Establishments, Employees, and Payroll: 1990 and 1995"; see also table 1279, "Retail Trade—Sales, by Kind of Business: 1980 to 1997" for a definition of eating and drinking places.

[2] Table 1279, "Retail Trade—Sales, by Kind of Business: 1980 to 1997."

[3] The Consumer Expenditure Survey is the most detailed source of consumer expenditures collected by the U.S. Government. The survey results are taken from two components: the Diary survey and the Interview survey. Participants in the Diary survey receive an instrument in which to record their expenditures for 1 week. At the end of that week, the original instrument is replaced by a new instrument, in which the participants record expenditures for their second (and final) survey week. In the Interview survey, participants are visited once every 3 months for five consecutive quarters, at which time they are asked to recall expenditures during the reference period for various items. When published, results from both surveys are integrated into a single tabular format. The data for meals at restaurants, carryouts, and others are selected from the Diary survey.

[4] A consumer unit is the standard unit of comparison in the Consumer Expenditure Survey. In general, a consumer unit is defined as members of a family related by blood, marriage, adoption, or other legal arrangement; a single person living alone or sharing a household with others but who is financially independent; or two or more persons living together who share responsibility for at least 2 out of 3 major types of expenses—food, housing, and other expenses. Students living in university-sponsored housing are con-

Table 3. Results of logistic regression, specific meals away from home, Diary Component, Consumer Expenditure Survey, 1997

Variable	Breakfast and brunch				Lunch			
	Parameter estimate	Standard error	Pr > chi-square	Probability (percent)	Parameter estimate	Standard error	Pr > chi-square	Probability (percent)
Intercept (control group):	–0.6645	0.1007	0.0001	34.0	0.7551	0.0963	0.0001	68.0
Income quintile:								
1st quintile	–.4455	.0884	.0001	24.8	–.5767	.0758	.0001	54.4
2nd quintile	–.0587	.0771	.4467	32.7	–.3239	.0709	.0001	60.6
4th quintile	.0707	.0741	.3401	35.6	.1855	.0755	.0140	71.9
5th quintile	.1407	.0762	.0650	37.2	.3604	.0804	.0001	75.3
Incomplete reporters	–.2639	.0699	.0002	28.3	–.6695	.0648	.0001	52.1
Number of earners:								
No earners[1]	–.1711	.1074	.1110	31.3	–.3481	.0937	.0002	59.4
Two earners[1]	.1556	.0667	.0196	32.9	.2376	.0633	.0002	70.8
Three or more earners[1]	.3815	.1024	.0002	40.7	.3608	.1037	.0005	70.0
Age of reference person:								
65 to 74	.0628	.0857	.4638	35.4	–.1911	.0767	.0127	63.7
75 and older	–.4004	.1101	.0003	25.6	–.3632	.0886	.0001	59.7
Family type:								
Single female	–.4749	.0879	.0001	24.2	–.2500	.0763	.0011	62.4
Husband/wife only	–.2057	.0887	.0204	29.5	–.1083	.0818	.1857	65.6
Husband/wife own children[1]	–.2492	.1147	.0298	27.9	–.1947	.1100	.0769	67.0
Other husband/wife[1]	–.2877	.1652	.0815	27.1	–.2075	.1613	.1983	66.7
Single parent[1]	–.1707	.1356	.2082	29.5	–.1382	.1273	.2774	68.2
Other families[1]	–.3078	.1372	.0249	26.7	–.1749	.1326	.1871	67.4
Additional adults:[2]								
One adult	.1578	.0964	.1016	32.0	–.0724	.0971	.4557	62.0
Two adults	–.1890	.1428	.1858	24.9	–.1475	.1396	.2905	60.2
Three or more adults	.2907	.2113	.1689	34.9	.3502	.2273	.1234	71.3
Number of children[1,2]								
One child	–.0372	.0865	.6675	27.9	.1463	.0850	.0851	67.0
Two children	.0967	.0901	.2829	30.6	.2846	.0905	.0017	70.0
Three or more children	.0882	.1131	.4354	30.5	.1486	.1119	.1844	67.0
Ethnic origin of reference person:								
Black	–.3616	.0824	.0001	26.4	–.4096	.0710	.0001	58.6
Hispanic	–.2851	.0867	.0010	27.9	–.1934	.0776	.0127	63.7
Education of the reference person:								
Did not graduate high school	–.1892	.0736	.0102	29.9	–.3521	.0631	.0001	59.9
Attended college	.1199	.0560	.0322	36.7	.1744	.0533	.0011	71.7
College graduate	.0543	.0583	.3518	35.2	.2481	.0567	.0001	73.2
Occupation category:								
Self–employed	–.0131	.0903	.8850	33.7	–.0826	.0884	.3505	66.2
Retired[1]	–.0919	.1125	.4139	28.3	–.0055	.1004	.9562	59.9
Not working (other than retired)[1]	.0494	.1007	.6235	31.3	–.0280	.0917	.7596	59.4
Housing tenure:								
Owner, no mortgage	.0237	.0631	.7073	34.5	.2110	.0597	.0004	72.4
Renter	–.0402	.0550	.4655	33.1	–.0375	.0522	.4723	67.2
Region of residence:								
Northeast	0205	.0615	.7390	34.4	–.0256	.0580	.6587	67.5
Midwest	0665	.0573	.2456	35.5	.1767	.0553	.0014	71.7
West	–.0304	.0591	.6073	33.3	–.1656	.0558	.0030	64.3
Degree urbanization:								
Rural	–.1585	.0728	.0295	30.5	–.2426	.0666	.0003	62.5

NOTE: For an explanation of "Pr > chi-square," see footnote 14 at the end of the article. In addition, notes for this table appear on the following page.

Table 3. Continued—Results of logistic regression, specific meals away from home, Diary Component, Consumer Expenditure Survey, 1997

Variable	Dinner				Snacks/nonalcoholic beverages			
	Parameter estimate	Standard error	Pr > chi-square	Probability (percent)	Parameter estimate	Standard error	Pr > chi-square	Probability (percent)
Intercept (control group):	0.5539	0.0942	0.0001	63.5	–0.1216	0.0942	0.1967	47.0
Income quintile:								
1st quintile	–.3994	.0753	.0001	53.9	–.4246	.0770	.0001	36.7
2nd quintile	–.3005	.0698	.0001	56.3	–.2387	.0706	.0007	41.1
4th quintile	.1771	.0718	.0136	67.5	.0969	.0700	.1664	49.4
5th quintile	.3311	.0758	.0001	70.8	.1004	.0728	.1678	49.5
Incomplete reporters	–.5652	.0636	.0001	49.7	–.7648	.0648	.0001	29.2
Number of earners:								
No earners[1]	–.3291	.0936	.0004	56.4	–.5109	.0968	.0001	38.3
Two earners[1]	.1299	.0618	.0356	64.0	.2462	.0616	.0001	55.6
Three or more earners[1]	.1899	.0994	.0561	64.2	.3201	.0976	.0010	57.3
Age of reference person:								
65 to 74	–.1565	.0764	.0405	59.8	–.4442	.0794	.0001	36.2
75 and older	–.5652	.0903	.0001	49.7	–.9066	.0991	.0001	26.3
Family type:								
Single female	–.4334	.0764	.0001	53.0	–.0297	.0791	.7077	46.2
Husband/wife only	–.1093	.0811	.1774	60.9	.1008	.0830	.2246	49.5
Husband/wife own children[1]	–.1649	.1076	.1254	58.8	.0198	.1076	.8537	50.2
Other husband/wife[1]	–.0998	.1570	.5251	60.4	.0052	.1558	.9736	49.9
Single parent[1]	–.2664	.1250	.0331	56.4	–.0802	.1253	.5220	47.8
Other families[1]	–.2352	.1294	.0692	57.1	–.1022	.1294	.4298	47.2
Additional adults:[2]								
One adult	.0060	.0936	.9486	59.7	.0766	.0921	.4053	49.4
Two adults	–.1369	.1347	.3095	56.3	.1725	.1328	.1940	51.8
Three or more adults	.2329	.2117	.2711	65.1	.0282	.2059	.8909	48.2
Number of children[1,2]								
One child	–.0320	.0824	.6976	58.8	.1118	.0812	.1685	50.2
Two children	.0767	.0870	.3779	61.4	.2573	.0854	.0026	53.9
Three or more children	–.0610	.1083	.5736	58.1	.1470	.1068	.1687	51.1
Black	–.5092	.0710	.0001	51.1	–.3878	.0729	.0001	37.5
Hispanic	–.3865	.0765	.0001	54.2	–.3878	.0778	.0001	37.5
Education of the reference person:								
Did not graduate high school	–.2962	.0634	.0001	56.4	–.1893	.0659	.0041	42.3
Attended college	1901	.0519	.0003	67.8	.1065	.0523	.0418	49.6
College graduate	.3439	.0550	.0001	71.0	.1838	.0546	.0008	51.6
Occupation category:								
Self–employed	–.0072	.0864	.9339	63.3	–.0580	.0853	.4961	45.5
Retired[1]	.0050	.0997	.9598	55.7	.1876	.1019	.0656	39.1
Not working (other than retired)[1]	0321	.0909	.7237	56.4	.1554	.0920	.0910	38.3
Housing tenure:								
Owner, no mortgage	.1346	.0584	.0212	66.6	.1067	.0590	.0705	49.6
Renter	–.0497	.0510	.3307	62.3	.0541	.0510	.2889	48.3
Region of residence:								
Northeast	.0086	.0569	.8793	63.7	.1396	.0572	.0147	50.4
Midwest	.1597	.0537	.0030	67.1	.2089	.0536	.0001	52.2
West	–.1294	.0547	.0180	60.5	.0385	.0548	.4822	47.9
Degree urbanization:								
Rural	–.1501	.0655	.0220	60.0	–.0950	.0663	.1521	44.6

[1]For explanation of how probability of purchase is calculated, see appendix.

[2]Probabilities calculated for husband and wife with own children only. Adding one adult in this case means that the child is 18 or older.

sidered to be separate consumer units. In this article, the term "family(ies)" will be considered "consumer unit(s)."

[5] Data are from the Diary component of the Consumer Expenditure Survey.

[6] The 95-percent confidence interval for this figure extends from about $1,426 to about $1,528, or $1,477 ± $51.

[7] Data are from the Consumer Expenditure Survey, integrated results. (This includes expenditures from both the Diary and Interview components of the survey; therefore, no confidence interval estimate is available.)

[8] The reference person is the first person mentioned when the respondent is asked to "Start with the name of the person or one of the persons who owns or rents this home."

[9] Note that the difference between these values is not statistically significant. The absolute value of the t-statistic comparing these two means is 0.69. At the 95-percent confidence level, the mean for breakfast and brunch away from home is approximately $2.22 ± $0.20; the mean for snacks and nonalcoholic beverages away from home is approximately $2.30 ± $0.12.

[10] The figure 0.7 of an earner reflects the fact that more families in this income quintile have no earner than have at least one earner.

[11] The phrase "husband, wife, and their own children only" specifically means that the husband, the wife, and their own child or children are the only people in this family, that is, there are no other members, such as uncles, aunts, grandchildren, and so forth; it is frequently termed the "nuclear family."

[12] For more information on spending by older age groups, see Geoffrey D. Paulin, "Expenditure patterns of older Americans, 1984–97," pp. 3-28, this issue.

[13] "Other" husband and wife families consist of a husband, wife, and at least one person who is not their child. This other person may be an elderly parent or other relative, a grandchild, or some other person in the family who is not financially independent of the husband and wife.

[14] In logit, the standard error of the parameter estimate is drawn from a chi-square distribution. The value "Pr > chi-square" then denotes the level of statistical significance of the parameter estimate. A value less than or equal to 0.05 indicates statistical significance at the 95-percent confidence level; a value less than or equal to 0.01 indicates statistical significance at the 99-percent confidence level.

[15] For further discussion, see Geoffrey D. Paulin, "The changing food-at-home budget: 1980 and 1992 compared," *Monthly Labor Review*, December 1998, pp. 3–32, especially p. 16.

Appendix: The logistic regression technique

Logistic regression. Logistic regression, or logit, is often used to predict the probability that an event will occur, based on a series of observed variables. In this case, the probability of incurring an expenditure for meals away from home, given a series of demographic characteristics, is examined.

One of the advantages of logit is that the coefficients are easily converted into probabilities without having to resort to special tables or other means of calculation. The formula for such a probability is

$$P = \exp(a + bX)/[1 + \exp(a + bX)]$$

where

P is the probability of observing a positive outcome (that is, a purchase)

a is a parameter estimate

b is a vector of parameter estimates

X is a vector of characteristics.

In the simplest example in this study, suppose one wants to calculate the probability of purchasing meals away from home for the control group described in the paper (that is, single men in the middle-income group, and so forth). Because all the independent variables in this case are binary, the only coefficient of concern is that for the intercept. In other words, using the results in table 2,

$$P = \exp(1.3634)/[1 + \exp(1.3634)] = 0.7963.$$

However, suppose one wanted to know the predicted probability for single women instead of single men. The predicted probability is

$$P = \exp(1.3634 - 0.3079)/[1 + \exp(1.3634 - 0.3079)] = 0.7418.$$

The coefficient for single women (–0.3079) is simply added into the equation as appropriate.

Probabilities for numbers of earners. In some cases, the situation is not so straightforward as it first appears. For example, it is possible for a single man to be an earner or nonearner. If a nonearner, the same procedure just outlined is applied—that is, the coefficient for nonearner (–0.3848) is added to the intercept coefficient (1.3634) before the equation is recalculated. However, note that the control group consists of single men earning a wage or salary. Therefore, if the single man is a nonearner, it is impossible for him to be earning a wage or salary. Therefore, he must either be retired or not working for another reason. Because his age is defined as under 65 for control group status, it is assumed that he is not working for a reason other than retirement. Therefore, an extra coefficient for occupation category (–0.0069) is included before the calculation is made. Note that the probability, then, for "no earner" and "not working (other than retired)" is the same, because the nonworker is also a nonearner, presumably.

Similarly, it is impossible for a single man to be a multiple earner. Therefore, the two-earner consumer units are assumed to consist of a husband and wife only, and the three-or-more-earner consumer units consist of a husband, wife, and one adult child (that is, the child is at least 18 years old). The appropriate coefficients are thus incorporated into the equation when calculating the probability of purchase for these groups.

Probabilities for different family types. As with number of earners, different family types can have different numbers of adults and children. Using the Diary data in this case can be quite tricky. This is because the survey results define "persons under 18 years of age" and "children" in different ways. The first categorization is obvious. But the second refers specifically to children of the reference person. These "children" could be well over the age of 18, but if they are living with their parents, they are still classified as "children." Similarly, consider a person under the age of 18 who is being raised by a grandparent, aunt or uncle, or some other relative. The "child" may be counted as a person under 18, but not necessarily as a "child" of the reference person. Or suppose that a very

young couple (for example, one person is 17 years old and the other is 18 years old) gets married, and lives with relatives. If the couple qualifies as a separate consumer unit, there is one person under 18 in that unit, even though there are no "children."
To solve these conundrums, the following definitions apply:

Husband and wife with own children only. The parents are treated as "adults" (regardless of age) and it is assumed (unless otherwise specified) that there is one child, who is under the age of 18. Adding one "adult" means that the child is 18 or over. However, there are still three persons present in the consumer unit for these families. (Likewise, if two additional adults are present, there are two children over 18, and two parents.) To obtain the estimated probability for a family with one child, the coefficients for the intercept (1.3634), family type (–0.2346), and one child (0.0907) are added before exponentiating. If the family consists of a husband, wife, and one child who is at least 18 years old, the coefficient for one child is replaced by the coefficient for one added adult (–0.0938).

Other husband and wife families. The only known factor of this composition is that there is a married couple present. There could also be at least one other adult (such as an elderly relative or sibling who is new to town), or there could be children present (for example, grandparents raising the grandchild). For ease of comparison with husband/wife and own children only, the probability is calculated assuming there is a married couple (two adults) and one other person who is under 18 (a child). (Again, note that a very young married couple could be temporarily raising a niece or nephew, and then there would be two persons under 18 in the consumer unit, using the example above. In each case, the husband and wife are treated as adults regardless of their actual age.)

Single parent families. These are assumed to consist of one parent (adult) and one child (person under 18). The parent is counted as an adult regardless of actual age.

Other families. For consistency, this family is assumed to consist of one adult and one child (person under 18) for ease of comparison with the other groups. An example is a grandparent and grandchild.

To calculate other family types. Single persons (even if they are college students under the age of 18), single parents, all married persons, and anyone who is at least 18 years old are considered to be adults. Anyone under the age of 18 who is not included in the categories just described is considered to be a child in this study.

Korean Occupational Outlook Handbook: first edition

Jin-Wook Seok

The crisis of the Korean economy increased the unemployment rate sharply in the country. Consequently, the government gave much greater attention and resources to employment policy. The *Korean Occupational Outlook Handbook* is a result of one of the employment policy programs. The project took a year to complete, of which 2 months were used for the translation and study of the Bureau of Labor Statistics *Occupational Outlook Handbook* of the United States, the *Occupational Handbook* of Japan, and the *Job Futures* of Canada. Seven researchers and a specialist prepared the *Korean Occupational Outlook Handbook*, but many other researchers, specialists, and academics were consulted and contributed their expertise.

The first edition of the *Korean Occupational Outlook Handbook (Korean Handbook)* was issued in July 1999. It is published by the Central Employment Information Management Office, Ministry of Labor, Republic of Korea. This report briefly summarizes the contents of the first *Korean Handbook*, explains the projection methodology, and discusses plans for future editions.

The contents

The first *Korean Occupational Outlook Handbook* took much of its template from the BLS *Occupational Outlook Handbook* of the United States and the *Occupational Handbook* of Japan. The contents of the *Korean Handbook* are composed of individual occupational statements, each with seven sections: Nature of the Job; Working Conditions; Education, Training and Other Qualifications; Employment; Earnings; Job Outlook; and Related Information Sources.

Nature of the Job includes a brief history or overall explanation about the job and the process of the work and the workers' duties or responsibilities.

Working Conditions outlines workplace circumstances, including weekly or monthly working hours, job-related stress, and other environmental conditions.

Education, Training, and Other Qualifications covers educational requirements and related academic majors, vocational training, certificates, licenses, and examinations for entry and advancement, and the advancement procedures.

Employment describes the number of persons in the occupation, the proportion of female workers in the profession, the geographic distribution of workers, and counts of workers who have certificates and academic degrees.

Earnings covers the monetary earnings and other benefits of workers in the occupation.

Job Outlook outlines trends of employment in the job during the next 5 years (including, if possible, yearly employment plans during the next 5 years), and the factors which positively and negatively affect the rate of employment of the occupation.

Related Information Sources lists contacts for obtaining additional information on the occupation.

Projection methodology

The employment projections in the *Korean Handbook* describe factors that affect labor market demand positively or negatively. In addition, the job outlook during the next 5 years is described in one of three degrees: employment will increase, decrease, or remain the same. The employment projection process concentrates mainly on interviewing representatives, specialists, and researchers in the occupation who can predict the outlook in their fields. Through interviews, researchers draw out the positive factors and negative factors which affect the rate of employment of the occupation. If the positive factors have greater strength than negative ones, for instance, they anticipate the employment will increase during the next 5 years. If both factors have nearly the same strength, they will describe that the employment rate in the occupation will not change during the next 5 years.

The occupational employment data for regression analysis is only available for the nine major occupational groups; therefore, formal statistical projections could not be used at the much more specific level of detail required for the *Korean Handbook*. The labor ministry researchers consulted the statistical estimates produced for the nine major groups by other government agencies, but the results did not significantly affect the qualitative judgments that that were produced by the interviews.

A sample statement

Subway operators are one of 214 occupations in the *Korean Handbook*; its "Job Outlook" statement follows:

"During the next five years the employment of subway operators will increase overall, but the job opportunities will be different among six major cities. In Seoul, though there will be some lines opening up partly, the number of job openings will be few, and the replacement openings will also be very few because many workers were recently employed. Therefore, during the next five years, there will be no large-scale recruitment as in 1996 or 1997. In Inchon, there was recruiting for the opening of the subway in 1999, so job openings can not be expected dur-

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ing the next five years.

"However, in four other major cities, a number of job openings are expected because the construction of the subways will be finished within five years. The first opening of a subway in Daejon (in the year 2001) and in Kwangju (in the year 2001), and the second openings in Pusan (in the year 2000), in Daegu (in the year 2002), in Daejon (in the year 2003) and in Kwangju (in the year 2004) will create between 100 and 200 job openings in the given year for each city.

"The recent competition rate for entry was approximately 1 out of 6 in Seoul and 1 out of 4 in other cities, and the stiff competition is expected to continue during the next five years."

Plans for future editions

The first *Korean Handbook* has considerable importance for employment policy programs in Korea. Nevertheless, the many changes planned for future editions can be summarized in three main categories:

- In developing the employment projection methodology fitted for Korean labor market environments, the researchers believe that qualitative analysis and judgment will be better and more useful in occupational projection than numerical estimation. To develop and prove the effectiveness and usefulness of qualitative projection methodology, the researchers will consider social-scientific methods such as the Delphi survey.
- Constructing an employment database—perhaps an industry-occupation matrix-will be a major advancement. Although it will take many years before there is sufficient data for statistical regression analysis, the numerical information is important in its own right and is needed for employment projections and its evaluation process.
- The Korean Standard Occupational Classification was revised. in late 1999. Studying or a new occupational classification system will allow the researchers to establish more specific rules to classify the occupations for future editions of the *Korean Handbook*. □

Uncertainty and labor contracts

Theoretical analyses of the duration of labor contracts identify two factors that determine contract length: the cost of negotiation and uncertainty. Negotiation costs have a positive relationship with duration—the more costly the negotiation, the longer the parties want the agreement to last. "The effect of uncertainty in the economic environment on contract length, on the other hand, depends on the type of uncertainty involved, with nominal uncertainty predicted to be associated with contracts of shorter duration and real shocks associated with longer contracts," writes Kevin J. Murphy in the March issue of *Labour Economics*.

Murphy goes on to estimate a generalized-probit, simultaneous equation model using data derived from contacts in the Bureau of Labor Statistics collective bargaining agreement file. His dependent variables are contract length, indexation, and rate of wage change specified in the contract. In his analysis of the results pertaining to contract duration, Murphy notes that of these endogenous variables, wage change has a small but statistically significant negative impact on contract duration and on that of the exogenous variables not related to uncertainty; regional and industry-specific standards have the strongest influence.

Murphy then examines the impact of four uncertainty variables: a measure of nominal uncertainty based on the mean square errors of a regression of the inflation rate at the time the contract is signed, a measure of real uncertainty based on the mean square errors of a regression of the unemployment rate, a measure of the uncertainty of the local labor market, and a measure of the uncertainty surrounding the ratio of consumer prices (which matter to workers) and producer prices (which matter to firms). Of these variables, all but the measure of local area uncertainty had significant coefficients of the expected sign. (The local uncertainty coefficient was not significant and perverse.)

These results, Murphy concludes, provide empirical support for the hypotheses that uncertainty about real shocks to the aggregate economy leads to contracts of longer duration, the degree of uncertainty about relative price shocks is inversely related to contract duration, and that greater nominal uncertainty reduces contract duration.

Tales of total factor productivity

Have you ever read a biography of an economic concept? Charles R. Hulten of the University of Maryland has written one about total factor productivity. In National Bureau of Economic Research Working Paper No. 7471, "Total Factor Productivity: A Short Biography," Hulten discusses the origins of the concept of total factor productivity and takes us through the decades of its development.

Simply put, total factor productivity, or TFP, relates output to the inputs used in its production. (The more familiar measure of productivity, labor productivity, compares output with only one input, the labor of workers.) TFP is measured as a "residual," using index number techniques. There has been much controversy over the years about how to measure TFP and about how important it is. A number of leading economists have played important roles in the evolution of TFP, among them Nobel Prize winner Robert M. Solow, Dale W. Jorgensen, and the late Zvi Griliches. Hulten discusses their roles in the development of TFP and those of others, including himself, over the course of this 75-page biography.

Hulten mentions that the 1980s were the "high-water mark" for the measurement of the TFP residual. This was when the Bureau of Labor Statistics first published its measures of productivity that take into account more than one factor; BLS uses the term "multifactor productivity" rather than "total factor productivity" for these measures to acknowledge that there might be relevant factors of production that one is not currently measuring or even able to measure.

In wrapping up his biography of TFP, Hulten writes: "The residual is still, after more than forty years, the work horse of empirical growth analysis. For all its flaws, real and imagined, many researchers have used it to gain valuable insights into the process of economic growth. Thousands of pages of research have been published, and the residual has become a closely watched government statistic."

Changes in job satisfaction

Job satisfaction can be viewed as a measure that reflects how workers react as individuals to all of the characteristics of their jobs. However, economists have not often dealt with this kind of subjective measure. In a recent NBER Working Paper No. 7332, "The Changing Distribution of Job Satisfaction," economist Daniel Hamermesh of the University of Texas examines how the distribution of subjective job satisfaction—particularly men's—has changed over the years in the United States and Germany.

Hamermesh's source of data for the United States is the BLS National Longitudinal Survey program. Specifically, he analyzed data from the 1978 National Longitudinal Survey of Young Men (NLSYM) and the 1988 National Longitudinal Survey of Youth (NLSY). The question asked in the surveys was: "How do you feel about your job?" There were four possible responses: 1) like it very much, 2) like it fairly well, 3) dislike it somewhat, and 4) dislike it very much.

Hamermesh found that the distribution of work satisfaction of young men in the United States widened and that this widening was correlated with changes in wage inequality. The job satisfaction of workers at upper earnings levels rose compared with workers at lower levels. In a separate analysis of data on male workers in Germany, Hamermesh observed similar results. □

Labor's struggles

RAVENSWOOD: The Steelworkers' Victory and the Revival of American Labor. By Tom Juravich and Kate Bronfenbrenner. New York, Cornell University Press, 1999, 245 pp. $29.95.

The labor market in the late 1990s can only be described as "tight." To attract new qualified employees, companies are forced to compete against each other. Bonuses, stock options, and attractive benefit plans are common incentives. So, is Tom Juravich and Kate Bronfenbrenner's book, *Ravenswood*, worthwhile? Essentially they chronicle the story of a small, dying West Virginia town that was revitalized by a Kaiser Aluminum plant in the 1950s, and then almost destroyed by it in the early 1990s. Perhaps if the above picture of the labor market as being a worker's paradise was completely accurate, then the Ravenswood saga would be simply an interesting chapter in the history of the American labor movement. However, downsizing, corporate mergers, and intense global competition are as common now as they were 10 years ago. While some segments of labor are benefiting greatly from today's high tech job market, others, like those in the manufacturing sector, are still on the defensive.

Ravenswood is an account of the United Steelworkers of America's strike against the Ravenswood Aluminum Company in the early 1990s. Juravich and Bronfenbrenner integrate interviews from the locked-out workers, members of the Ravenswood local community, and others who played a pivotal role in the union's struggle in order to describe the Ravenswood experience. The vivid accounts given by those involved in the 20-month labor dispute reveal the importance of examining the Ravenswood case. While the clash between the Steelworkers and the Ravenswood Aluminum Company was not the largest strike or the longest in American history, it is a clear example of how the nature of a strike evolved into a multistage, multinational assault. No longer were workers merely relying on the local press to cover their picket lines. Instead union strategists mobilized laborers from across the globe, organized an end-consumer campaign and fostered union solidarity.

Juravich and Bronfenbrenner, while extensively trained in labor relations, wrote *Ravenswood* to appeal to a larger audience. The average reader will be able to understand and appreciate the strikers' accounts of the struggle against the company and the corresponding analysis by the authors. *Ravenswood*, however, did contain enough detail so that a reader versed in union rhetoric would find it appealing also. Although the book is written clearly with a unionist slant, the authors managed to write a gritty portrayal of the extremes each side was willing to go to and what each side accomplished or lost as a result of the strike.

The stage for battle was set in the first chapter with a stark rendition of the inhumane working conditions of Ravenswood's pot room during the summer of 1990. By the end of that summer, four people had died and the union's outcries about deteriorating working conditions, according to Juravich and Bronfenbrenner, fell on the deaf ears of the management. The clash between union officials and management was exacerbated when the existing union contact expired. The conflict continued when management declared the negotiations to be at an impasse. When union employees went to work on November 1, they were locked out of a fortified plant and antagonized by permanent replacement workers.

The union's fight would not be an easy one for several reasons. Prior to the Ravenswood lockout, unions across the country in different industries were forced to make large concessions to management. In addition, one of the new owners had a personal vendetta against the union. To complicate matters, Marc Rich, an influential member of the aluminum industry, was also involved. The confrontational tone established in the first few chapters is continued throughout *Ravenswood*.

Although the steelworkers ultimately went back to work, they did not achieve all their goals.

Juravich and Bronfenbrenner do a commendable job of examining the union's struggle in terms of its impact on the small West Virginian town and on the labor movement in general.

Julie Hatch
Office of Employment and Unemployment Statistics, Bureau of Labor Statistics

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This section of the *Review* presents the principal statistical series collected and calculated by the Bureau of Labor Statistics: series on labor force; employment; unemployment; labor compensation; consumer, producer, and international prices; productivity; international comparisons; and injury and illness statistics. In the notes that follow, the data in each group of tables are briefly described; key definitions are given; notes on the data are set forth; and sources of additional information are cited.

General notes

The following notes apply to several tables in this section:

Seasonal adjustment. Certain monthly and quarterly data are adjusted to eliminate the effect on the data of such factors as climatic conditions, industry production schedules, opening and closing of schools, holiday buying periods, and vacation practices, which might prevent short-term evaluation of the statistical series. Tables containing data that have been adjusted are identified as "seasonally adjusted." (All other data are not seasonally adjusted.) Seasonal effects are estimated on the basis of past experience. When new seasonal factors are computed each year, revisions may affect seasonally adjusted data for several preceding years.

Seasonally adjusted data appear in tables 1–14, 16–17, 39, and 43. Seasonally adjusted labor force data in tables 1 and 4–9 were revised in the February 2000 issue of the *Review*. Seasonally adjusted establishment survey data shown in tables 1, 12–14 and 16–17 were revised in the July 1999 *Review* and reflect the experience through March 1999. A brief explanation of the seasonal adjustment methodology appears in "Notes on the data."

Revisions in the productivity data in table 45 are usually introduced in the September issue. Seasonally adjusted indexes and percent changes from month-to-month and quarter-to-quarter are published for numerous Consumer and Producer Price Index series. However, seasonally adjusted indexes are not published for the U.S. average All-Items CPI. Only seasonally adjusted percent changes are available for this series.

Adjustments for price changes. Some data—such as the "real" earnings shown in table 14—are adjusted to eliminate the effect of changes in price. These adjustments are made by dividing current-dollar values by the Consumer Price Index or the appropriate component of the index, then multiplying by 100. For example, given a current hourly wage rate of $3 and a current price index number of 150, where 1982 = 100, the hourly rate expressed in 1982 dollars is $2 ($3/150 x 100 = $2). The $2 (or any other resulting values) are described as "real," "constant," or "1982" dollars.

Sources of information

Data that supplement the tables in this section are published by the Bureau in a variety of sources. Definitions of each series and notes on the data are contained in later sections of these Notes describing each set of data. For detailed descriptions of each data series, see *BLS Handbook of Methods*, Bulletin 2490. Users also may wish to consult *Major Programs of the Bureau of Labor Statistics*, Report 919. News releases provide the latest statistical information published by the Bureau; the major recurring releases are published according to the schedule appearing on the back cover of this issue.

More information about labor force, employment, and unemployment data and the household and establishment surveys underlying the data are available in the Bureau's monthly publication, *Employment and Earnings*. Historical unadjusted and seasonally adjusted data from the household survey are available on the Internet:

http://stats.bls.gov/cpshome.htm

Historically comparable unadjusted and seasonally adjusted data from the establishment survey also are available on the Internet:

http://stats.bls.gov/ceshome.htm

Additional information on labor force data for areas below the national level are provided in the BLS annual report, *Geographic Profile of Employment and Unemployment.*

For a comprehensive discussion of the Employment Cost Index, see *Employment Cost Indexes and Levels, 1975–95*, BLS Bulletin 2466. The most recent data from the Employee Benefits Survey appear in the following Bureau of Labor Statistics bulletins: *Employee Benefits in Medium and Large Firms; Employee Benefits in Small Private Establishments;* and *Employee Benefits in State and Local Governments.*

More detailed data on consumer and producer prices are published in the monthly periodicals, *The CPI Detailed Report* and *Producer Price Indexes*. For an overview of the 1998 revision of the CPI, see the December 1996 issue of the *Monthly Labor Review*. Additional data on international prices appear in monthly news releases.

Listings of industries for which productivity indexes are available may be found on the Internet:

http://stats.bls.gov/iprhome.htm

For additional information on international comparisons data, see *International Comparisons of Unemployment,* BLS Bulletin 1979.

Detailed data on the occupational injury and illness series are published in *Occupational Injuries and Illnesses in the United States, by Industry,* a BLS annual bulletin.

Finally, the *Monthly Labor Review* carries analytical articles on annual and longer term developments in labor force, employment, and unemployment; employee compensation and collective bargaining; prices; productivity; international comparisons; and injury and illness data.

Symbols

n.e.c. = not elsewhere classified.
n.e.s. = not elsewhere specified.
p = preliminary. To increase the timeliness of some series, preliminary figures are issued based on representative but incomplete returns.
r = revised. Generally, this revision reflects the availability of later data, but also may reflect other adjustments.

Comparative Indicators

(Tables 1–3)

Comparative indicators tables provide an overview and comparison of major BLS statistical series. Consequently, although many of the included series are available monthly, all measures in these comparative tables are presented quarterly and annually.

Labor market indicators include employment measures from two major surveys and information on rates of change in compensation provided by the Employment Cost Index (ECI) program. The labor force participation rate, the employment-to-population ratio, and unemployment rates for major demographic groups based on the Current Population ("household") Survey are presented, while measures of employment and average weekly hours by major industry sector are given using nonfarm payroll data. The Employment Cost Index (compensation), by major sector and by bargaining status, is chosen from a variety of BLS compensation and wage measures because it provides a comprehensive measure of employer costs for hiring labor, not just outlays for wages, and it is not affected by employment shifts among occupations and industries.

Data on **changes in compensation, prices, and productivity** are presented in table 2.

Measures of rates of change of compensation and wages from the Employment Cost Index program are provided for all civilian nonfarm workers (excluding Federal and household workers) and for all private nonfarm workers. Measures of changes in consumer prices for all urban consumers; producer prices by stage of processing; overall prices by stage of processing; and overall export and import price indexes are given. Measures of productivity (output per hour of all persons) are provided for major sectors.

Alternative measures of wage and compensation rates of change, which reflect the overall trend in labor costs, are summarized in table 3. Differences in concepts and scope, related to the specific purposes of the series, contribute to the variation in changes among the individual measures.

Notes on the data

Definitions of each series and notes on the data are contained in later sections of these notes describing each set of data.

Employment and Unemployment Data

(Tables 1; 4–20)

Household survey data

Description of the series

EMPLOYMENT DATA in this section are obtained from the Current Population Survey, a program of personal interviews conducted monthly by the Bureau of the Census for the Bureau of Labor Statistics. The sample consists of about 50,000 households selected to represent the U.S. population 16 years of age and older. Households are interviewed on a rotating basis, so that three-fourths of the sample is the same for any 2 consecutive months.

Definitions

Employed persons include (1) all those who worked for pay any time during the week which includes the 12th day of the month or who worked unpaid for 15 hours or more in a family-operated enterprise and (2) those who were temporarily absent from their regular jobs because of illness, vacation, industrial dispute, or similar reasons. A person working at more than one job is counted only in the job at which he or she worked the greatest number of hours.

Unemployed persons are those who did not work during the survey week, but were available for work except for temporary illness and had looked for jobs within the preceding 4 weeks. Persons who did not look for work because they were on layoff are also counted among the unemployed. **The unemployment rate** represents the number unemployed as a percent of the civilian labor force.

The **civilian labor force** consists of all employed or unemployed persons in the civilian noninstitutional population. Persons **not in the labor force** are those not classified as employed or unemployed. This group includes discouraged workers, defined as persons who want and are available for a job and who have looked for work sometime in the past 12 months (or since the end of their last job if they held one within the past 12 months), but are not currently looking, because they believe there are no jobs available or there are none for which they would qualify. The **civilian noninstitutional population** comprises all persons 16 years of age and older who are not inmates of penal or mental institutions, sanitariums, or homes for the aged, infirm, or needy. The **civilian labor force participation** rate is the proportion of the civilian noninstitutional population that is in the labor force. The **employment-population ratio** is employment as a percent of the civilian noninstitutional population.

Notes on the data

From time to time, and especially after a decennial census, adjustments are made in the Current Population Survey figures to correct for estimating errors during the intercensal years. These adjustments affect the comparability of historical data. A description of these adjustments and their effect on the various data series appears in the Explanatory Notes of *Employment and Earnings*.

Labor force data in tables 1 and 4–9 are seasonally adjusted. Since January 1980, national labor force data have been seasonally adjusted with a procedure called X-11 ARIMA which was developed at Statistics Canada as an extension of the standard X-11 method previously used by BLS. A detailed description of the procedure appears in the X-11 *ARIMA Seasonal Adjustment Method,* by Estela Bee Dagum (Statistics Canada, Catalogue No. 12-564E, January 1983).

At the beginning of each calendar year, historical seasonally adjusted data usually are revised, and projected seasonal adjustment factors are calculated for use during the January–June period. The historical seasonally adjusted data usually are revised for only the most recent 5 years. In July, new seasonal adjustment factors, which incorporate the experience through June, are produced for the July–December period, but no revisions are made in the historical data.

Revisions in the household survey

Data beginning in 2000 are not strictly comparable with data for 1999 and earlier years because of the introduction of revised population controls. Additional information appears in the February 2000 issue of *Employment and Earnings*.

FOR ADDITIONAL INFORMATION on national household survey data, contact the Division of Labor Force Statistics: (202) 691–6378.

Establishment survey data

Description of the series

EMPLOYMENT, HOURS, AND EARNINGS DATA in this section are compiled from payroll records reported monthly on a voluntary basis to the Bureau of Labor Statistics and its cooperating State agencies by about 390,000 establishments representing all industries except agriculture. Industries are classified in accordance with the 1987 *Standard Industrial Classification (SIC) Manual.* In most industries, the sampling probabilities are based on the size of the establishment; most large establishments are therefore in the sample. (An establishment is not necessarily a firm; it may be a branch plant, for example, or warehouse.) Self-employed persons and others not on a regular civilian payroll are outside the scope of the survey because they are excluded from establishment records. This largely accounts for the difference in employment figures between the household and establishment surveys.

Definitions

An **establishment** is an economic unit which produces goods or services (such as a factory or store) at a single location and is engaged in one type of economic activity.

Employed persons are all persons who received pay (including holiday and sick pay) for any part of the payroll period including the 12th day of the month. Persons holding more than one job (about 5 percent of all persons in the labor force) are counted in each establishment which reports them.

Production workers in manufacturing include working supervisors and nonsupervisory workers closely associated with production operations. Those workers mentioned in tables 11–16 include production workers in manufacturing and mining;

construction workers in construction; and nonsupervisory workers in the following industries: transportation and public utilities; wholesale and retail trade; finance, insurance, and real estate; and services. These groups account for about four-fifths of the total employment on private nonagricultural payrolls.

Earnings are the payments production or nonsupervisory workers receive during the survey period, including premium pay for overtime or late-shift work but excluding irregular bonuses and other special payments. **Real earnings** are earnings adjusted to reflect the effects of changes in consumer prices. The deflator for this series is derived from the Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W).

Hours represent the average weekly hours of production or nonsupervisory workers for which pay was received, and are different from standard or scheduled hours. **Overtime hours** represent the portion of average weekly hours which was in excess of regular hours and for which overtime premiums were paid.

The **Diffusion Index** represents the percent of industries in which employment was rising over the indicated period, plus one-half of the industries with unchanged employment; 50 percent indicates an equal balance between industries with increasing and decreasing employment. In line with Bureau practice, data for the 1-, 3-, and 6-month spans are seasonally adjusted, while those for the 12-month span are unadjusted. Data are centered within the span. Table 17 provides an index on private nonfarm employment based on 356 industries, and a manufacturing index based on 139 industries. These indexes are useful for measuring the dispersion of economic gains or losses and are also economic indicators.

Notes on the data

Establishment survey data are annually adjusted to comprehensive counts of employment (called "benchmarks"). The latest adjustment, which incorporated March 1998 benchmarks, was made with the release of May 1999 data, published in the July 1999 issue of the *Review*. Coincident with the benchmark adjustment, historical seasonally adjusted data were revised to reflect updated seasonal factors and refinement in the seasonal adjustment procedures. Unadjusted data from April 1998 forward and seasonally adjusted data from January 1995 forward are subject to revision in future benchmarks.

Revisions in State data (table 11) occurred with the publication of January 2000 data.

Beginning in June 1996, the BLS uses the X-12 ARIMA methodology to seasonally adjust establishment survey data. This procedure, developed by the Bureau of the Census, controls for the effect of varying survey intervals (also known as the 4- versus 5-week effect), thereby providing improved measurement of over-the-month changes and underlying economic trends. Revisions of data, usually for the most recent 5-year period, are made once a year coincident with the benchmark revisions.

In the establishment survey, estimates for the most recent 2 months are based on incomplete returns and are published as preliminary in the tables (12–17 in the *Review*). When all returns have been received, the estimates are revised and published as "final" (prior to any benchmark revisions) in the third month of their appearance. Thus, December data are published as preliminary in January and February and as final in March. For the same reasons, quarterly establishment data (table 1) are preliminary for the first 2 months of publication and final in the third month. Thus, fourth-quarter data are published as preliminary in January and February and as final in March.

A comprehensive discussion of the differences between household and establishment data on employment appears in Gloria P. Green, "Comparing employment estimates from household and payroll surveys," *Monthly Labor Review*, December 1969, pp. 9–20.

FOR ADDITIONAL INFORMATION on establishment survey data, contact the Division of Monthly Industry Employment Statistics: (202) 691–6555.

Unemployment data by State

Description of the series

Data presented in this section are obtained from the Local Area Unemployment Statistics (LAUS) program, which is conducted in cooperation with State employment security agencies.

Monthly estimates of the labor force, employment, and unemployment for States and sub-State areas are a key indicator of local economic conditions, and form the basis for determining the eligibility of an area for benefits under Federal economic assistance programs such as the Job Training Partnership Act. Seasonally adjusted unemployment rates are presented in table 10. Insofar as possible, the concepts and definitions underlying these data are those used in the national estimates obtained from the CPS.

Notes on the data

Data refer to State of residence. Monthly data for all States and the District of Columbia are derived using standardized procedures established by BLS. Once a year, estimates are revised to new population controls, usually with publication of January estimates, and benchmarked to annual average CPS levels.

FOR ADDITIONAL INFORMATION on data in this series, call (202) 691–6392 (table 10) or (202) 691–6559 (table 11).

Compensation and Wage Data

(Tables 1–3; 21–27)

COMPENSATION AND WAGE DATA are gathered by the Bureau from business establishments, State and local governments, labor unions, collective bargaining agreements on file with the Bureau, and secondary sources.

Employment Cost Index

Description of the series

The **Employment Cost Index** (ECI) is a quarterly measure of the rate of change in compensation per hour worked and includes wages, salaries, and employer costs of employee benefits. It uses a fixed market basket of labor—similar in concept to the Consumer Price Index's fixed market basket of goods and services—to measure change over time in employer costs of employing labor.

Statistical series on total compensation costs, on wages and salaries, and on benefit costs are available for private nonfarm workers excluding proprietors, the self-employed, and household workers. The total compensation costs and wages and salaries series are also available for State and local government workers and for the civilian nonfarm economy, which consists of private industry and State and local government workers combined. Federal workers are excluded.

The Employment Cost Index probability sample consists of about 4,400 private nonfarm establishments providing about 23,000 occupational observations and 1,000 State and local government establishments providing 6,000 occupational observations selected to represent total employment in each sector. On average, each reporting unit provides wage and compensation information on five well-specified occupations. Data are collected each quarter for the pay period including the 12th day of March, June, September, and December.

Beginning with June 1986 data, fixed employment weights from the 1980 Census of Population are used each quarter to calculate the civilian and private indexes and the index for State and local governments. (Prior to June 1986, the employment weights are from the 1970 Census of Population.) These fixed weights, also used to derive all of the industry and occupation series indexes, ensure that changes in these indexes reflect only changes in compensa-

tion, not employment shifts among industries or occupations with different levels of wages and compensation. For the bargaining status, region, and metropolitan/nonmetropolitan area series, however, employment data by industry and occupation are not available from the census. Instead, the 1980 employment weights are reallocated within these series each quarter based on the current sample. Therefore, these indexes are not strictly comparable to those for the aggregate, industry, and occupation series.

Definitions

Total compensation costs include wages, salaries, and the employer's costs for employee benefits.

Wages and salaries consist of earnings before payroll deductions, including production bonuses, incentive earnings, commissions, and cost-of-living adjustments.

Benefits include the cost to employers for paid leave, supplemental pay (including nonproduction bonuses), insurance, retirement and savings plans, and legally required benefits (such as Social Security, workers' compensation, and unemployment insurance).

Excluded from wages and salaries and employee benefits are such items as payment-in-kind, free room and board, and tips.

Notes on the data

The Employment Cost Index for changes in wages and salaries in the private nonfarm economy was published beginning in 1975. Changes in total compensation cost—wages and salaries and benefits combined—were published beginning in 1980. The series of changes in wages and salaries and for total compensation in the State and local government sector and in the civilian nonfarm economy (excluding Federal employees) were published beginning in 1981. Historical indexes (June 1981=100) are available on the Internet:

http://stats.bls.gov/ecthome.htm

FOR ADDITIONAL INFORMATION on the Employment Cost Index, contact the Office of Compensation Levels and Trends: (202) 691–6199.

Employee Benefits Survey

Description of the series

Employee benefits data are obtained from the Employee Benefits Survey, an annual survey of the incidence and provisions of selected benefits provided by employers. The survey collects data from a sample of approximately 9,000 private sector and State and local government establishments. The data are presented as a percentage of employees who participate in a certain benefit, or as an average benefit provision (for example, the average number of paid holidays provided to employees per year). Selected data from the survey are presented in table 25 for medium and large private establishments and in table 26 for small private establishments and State and local government.

The survey covers paid leave benefits such as holidays and vacations, and personal, funeral, jury duty, military, family, and sick leave; short-term disability, long-term disability, and life insurance; medical, dental, and vision care plans; defined benefit and defined contribution plans; flexible benefits plans; reimbursement accounts; and unpaid family leave.

Also, data are tabulated on the incidence of several other benefits, such as severance pay, child-care assistance, wellness programs, and employee assistance programs.

Definitions

Employer-provided benefits are benefits that are financed either wholly or partly by the employer. They may be sponsored by a union or other third party, as long as there is some employer financing. However, some benefits that are fully paid for by the employee also are included. For example, long-term care insurance and postretirement life insurance paid entirely by the employee are included because the guarantee of insurability and availability at group premium rates are considered a benefit.

Participants are workers who are covered by a benefit, whether or not they use that benefit. If the benefit plan is financed wholly by employers and requires employees to complete a minimum length of service for eligibility, the workers are considered participants whether or not they have met the requirement. If workers are required to contribute towards the cost of a plan, they are considered participants only if they elect the plan and agree to make the required contributions.

Defined benefit pension plans use predetermined formulas to calculate a retirement benefit (if any), and obligate the employer to provide those benefits. Benefits are generally based on salary, years of service, or both.

Defined contribution plans generally specify the level of employer and employee contributions to a plan, but not the formula for determining eventual benefits. Instead, individual accounts are set up for participants, and benefits are based on amounts credited to these accounts.

Tax-deferred savings plans are a type of defined contribution plan that allow participants to contribute a portion of their salary to an employer-sponsored plan and defer income taxes until withdrawal.

Flexible benefit plans allow employees to choose among several benefits, such as life insurance, medical care, and vacation days, and among several levels of coverage within a given benefit.

Notes on the data

Surveys of employees in medium and large establishments conducted over the 1979–86 period included establishments that employed at least 50, 100, or 250 workers, depending on the industry (most service industries were excluded). The survey conducted in 1987 covered only State and local governments with 50 or more employees. The surveys conducted in 1988 and 1989 included medium and large establishments with 100 workers or more in private industries. All surveys conducted over the 1979–89 period excluded establishments in Alaska and Hawaii, as well as part-time employees.

Beginning in 1990, surveys of State and local governments and small private establishments were conducted in even-numbered years, and surveys of medium and large establishments were conducted in odd-numbered years. The small establishment survey includes all private nonfarm establishments with fewer than 100 workers, while the State and local government survey includes all governments, regardless of the number of workers. All three surveys include full- and part-time workers, and workers in all 50 States and the District of Columbia.

FOR ADDITIONAL INFORMATION on the Employee Benefits Survey, contact the Office of Compensation Levels and Trends on the Internet:

http://stats.bls.gov/ebshome.htm

Work stoppages

Description of the series

Data on work stoppages measure the number and duration of major strikes or lockouts (involving 1,000 workers or more) occurring during the month (or year), the number of workers involved, and the amount of work time lost because of stoppage. These data are presented in table 27.

Data are largely from a variety of published sources and cover only establishments directly involved in a stoppage. They do not measure the indirect or secondary effect of stoppages on other establishments whose employees are idle owing to material shortages or lack of service.

Definitions

Number of stoppages: The number of strikes and lockouts involving 1,000 work-

ers or more and lasting a full shift or longer.

Workers involved: The number of workers directly involved in the stoppage.

Number of days idle: The aggregate number of workdays lost by workers involved in the stoppages.

Days of idleness as a percent of estimated working time: Aggregate workdays lost as a percent of the aggregate number of standard workdays in the period multiplied by total employment in the period.

Notes on the data

This series is not comparable with the one terminated in 1981 that covered strikes involving six workers or more.

FOR ADDITIONAL INFORMATION on work stoppages data, contact the Office of Compensation and Working Conditions: (202) 691–6282, or the Internet:

http://stats.bls.gov/cbahome.htm

Price Data

(Tables 2; 28–38)

PRICE DATA are gathered by the Bureau of Labor Statistics from retail and primary markets in the United States. Price indexes are given in relation to a base period—1982 = 100 for many Producer Price Indexes, 1982–84 = 100 for many Consumer Price Indexes (unless otherwise noted), and 1990 = 100 for International Price Indexes.

Consumer Price Indexes

Description of the series

The **Consumer Price Index** (CPI) is a measure of the average change in the prices paid by urban consumers for a fixed market basket of goods and services. The CPI is calculated monthly for two population groups, one consisting only of urban households whose primary source of income is derived from the employment of wage earners and clerical workers, and the other consisting of all urban households. The wage earner index (CPI-W) is a continuation of the historic index that was introduced well over a half-century ago for use in wage negotiations. As new uses were developed for the CPI in recent years, the need for a broader and more representative index became apparent. The all-urban consumer index (CPI-U), introduced in 1978, is representative of the 1993–95 buying habits of about 87 percent of the noninstitutional population of the United States at that time, compared with 32 percent represented in the CPI-W. In addition to wage earners and clerical workers, the CPI-U covers professional, managerial, and technical workers, the self-employed, short-term workers, the unemployed, retirees, and others not in the labor force.

The CPI is based on prices of food, clothing, shelter, fuel, drugs, transportation fares, doctors' and dentists' fees, and other goods and services that people buy for day-to-day living. The quantity and quality of these items are kept essentially unchanged between major revisions so that only price changes will be measured. All taxes directly associated with the purchase and use of items are included in the index.

Data collected from more than 23,000 retail establishments and 5,800 housing units in 87 urban areas across the country are used to develop the "U.S. city average." Separate estimates for 14 major urban centers are presented in table 29. The areas listed are as indicated in footnote 1 to the table. The area indexes measure only the average change in prices for each area since the base period, and do not indicate differences in the level of prices among cities.

Notes on the data

In January 1983, the Bureau changed the way in which homeownership costs are meaured for the CPI-U. A rental equivalence method replaced the asset-price approach to homeownership costs for that series. In January 1985, the same change was made in the CPI-W. The central purpose of the change was to separate shelter costs from the investment component of home-ownership so that the index would reflect only the cost of shelter services provided by owner-occupied homes. An updated CPI-U and CPI-W were introduced with release of the January 1987 and January 1998 data.

FOR ADDITIONAL INFORMATION on consumer prices, contact the Division of Consumer Prices and Price Indexes: (202) 691–7000.

Producer Price Indexes

Description of the series

Producer Price Indexes (PPI) measure average changes in prices received by domestic producers of commodities in all stages of processing. The sample used for calculating these indexes currently contains about 3,200 commodities and about 80,000 quotations per month, selected to represent the movement of prices of all commodities produced in the manufacturing; agriculture, forestry, and fishing; mining; and gas and electricity and public utilities sectors. The stage-of-processing structure of PPI organizes products by class of buyer and degree of fabrication (that is, finished goods, intermediate goods, and crude materials). The traditional commodity structure of PPI organizes products by similarity of end use or material composition. The industry and product structure of PPI organizes data in accordance with the Standard Industrial Classification (SIC) and the product code extension of the SIC developed by the U.S. Bureau of the Census.

To the extent possible, prices used in calculating Producer Price Indexes apply to the first significant commercial transaction in the United States from the production or central marketing point. Price data are generally collected monthly, primarily by mail questionnaire. Most prices are obtained directly from producing companies on a voluntary and confidential basis. Prices generally are reported for the Tuesday of the week containing the 13th day of the month.

Since January 1992, price changes for the various commodities have been averaged together with implicit quantity weights representing their importance in the total net selling value of all commodities as of 1987. The detailed data are aggregated to obtain indexes for stage-of-processing groupings, commodity groupings, durability-of-product groupings, and a number of special composite groups. All Producer Price Index data are subject to revision 4 months after original publication.

FOR ADDITIONAL INFORMATION on producer prices, contact the Division of Industrial Prices and Price Indexes: (202) 691–7705.

International Price Indexes

Description of the series

The **International Price Program** produces monthly and quarterly export and import price indexes for nonmilitary goods traded between the United States and the rest of the world. The export price index provides a measure of price change for all products sold by U.S. residents to foreign buyers. ("Residents" is defined as in the national income accounts; it includes corporations, businesses, and individuals, but does not require the organizations to be U.S. owned nor the individuals to have U.S. citizenship.) The import price index provides a measure of price change for goods purchased from other countries by U.S. residents.

The product universe for both the import and export indexes includes raw materials, agricultural products, semifinished manufactures, and finished manufactures, including both capital and consumer goods. Price data for these items are collected primarily by mail questionnaire. In nearly all cases, the data are collected directly from the exporter or importer, although in a few cases, prices are obtained from other sources.

To the extent possible, the data gathered refer to prices at the U.S. border for exports

and at either the foreign border or the U.S. border for imports. For nearly all products, the prices refer to transactions completed during the first week of the month. Survey respondents are asked to indicate all discounts, allowances, and rebates applicable to the reported prices, so that the price used in the calculation of the indexes is the actual price for which the product was bought or sold.

In addition to general indexes of prices for U.S. exports and imports, indexes are also published for detailed product categories of exports and imports. These categories are defined according to the five-digit level of detail for the Bureau of Economic Analysis End-use Classification (SITC), and the four-digit level of detail for the Harmonized System. Aggregate import indexes by country or region of origin are also available.

BLS publishes indexes for selected categories of internationally traded services, calculated on an international basis and on a balance-of-payments basis.

Notes on the data

The export and import price indexes are weighted indexes of the Laspeyres type. Price relatives are assigned equal importance within each harmonized group and are then aggregated to the higher level. The values assigned to each weight category are based on trade value figures compiled by the Bureau of the Census. The trade weights currently used to compute both indexes relate to 1990.

Because a price index depends on the same items being priced from period to period, it is necessary to recognize when a product's specifications or terms of transaction have been modified. For this reason, the Bureau's questionnaire requests detailed descriptions of the physical and functional characteristics of the products being priced, as well as information on the number of units bought or sold, discounts, credit terms, packaging, class of buyer or seller, and so forth. When there are changes in either the specifications or terms of transaction of a product, the dollar value of each change is deleted from the total price change to obtain the "pure" change. Once this value is determined, a linking procedure is employed which allows for the continued repricing of the item.

For the export price indexes, the preferred pricing is f.a.s. (free alongside ship) U.S. port of exportation. When firms report export prices f.o.b. (free on board), production point information is collected which enables the Bureau to calculate a shipment cost to the port of exportation. An attempt is made to collect two prices for imports. The first is the import price f.o.b. at the foreign port of exportation, which is consistent with the basis for valuation of imports in the national accounts. The second is the import price c.i.f.(costs, insurance, and freight) at the U.S. port of importation, which also includes the other costs associated with bringing the product to the U.S. border. It does not, however, include duty charges. For a given product, only one price basis series is used in the construction of an index.

FOR ADDITIONAL INFORMATION on international prices, contact the Division of International Prices: (202) 691–7155.

Productivity Data

(Tables 2; 39–42)

Business sector and major sectors

Description of the series

The productivity measures relate real output to real input. As such, they encompass a family of measures which include single-factor input measures, such as output per hour, output per unit of labor input, or output per unit of capital input, as well as measures of multifactor productivity (output per unit of combined labor and capital inputs). The Bureau indexes show the change in output relative to changes in the various inputs. The measures cover the business, nonfarm business, manufacturing, and nonfinancial corporate sectors.

Corresponding indexes of hourly compensation, unit labor costs, unit nonlabor payments, and prices are also provided.

Definitions

Output per hour of all persons (labor productivity) is the quantity of goods and services produced per hour of labor input. **Output per unit of capital services** (capital productivity) is the quantity of goods and services produced per unit of capital services input. **Multifactor productivity** is the quantity of goods and services produced per combined inputs. For private business and private nonfarm business, inputs include labor and capital units. For manufacturing, inputs include labor, capital, energy, non-energy materials, and purchased business services.

Compensation per hour is total compensation divided by hours at work. Total compensation equals the wages and salaries of employees plus employers' contributions for social insurance and private benefit plans, plus an estimate of these payments for the self-employed (except for nonfinancial corporations in which there are no self-employed). **Real compensation per hour** is compensation per hour deflated by the change in the Consumer Price Index for All Urban Consumers.

Unit labor costs are the labor compensation costs expended in the production of a unit of output and are derived by dividing compensation by output. **Unit nonlabor payments** include profits, depreciation, interest, and indirect taxes per unit of output. They are computed by subtracting compensation of all persons from current-dollar value of output and dividing by output.

Unit nonlabor costs contain all the components of unit nonlabor payments except unit profits.

Unit profits include corporate profits with inventory valuation and capital consumption adjustments per unit of output.

Hours of all persons are the total hours at work of payroll workers, self-employed persons, and unpaid family workers.

Labor inputs are hours of all persons adjusted for the effects of changes in the education and experience of the labor force.

Capital services are the flow of services from the capital stock used in production. It is developed from measures of the net stock of physical assets—equipment, structures, land, and inventories—weighted by rental prices for each type of asset.

Combined units of labor and capital inputs are derived by combining changes in labor and capital input with weights which represent each component's share of total cost. Combined units of labor, capital, energy, materials, and purchased business services are similarly derived by combining changes in each input with weights that represent each input's share of total costs. The indexes for each input and for combined units are based on changing weights which are averages of the shares in the current and preceding year (the Tornquist index-number formula).

Notes on the data

Business sector output is an annually-weighted index constructed by excluding from real gross domestic product (GDP) the following outputs: general government, nonprofit institutions, paid employees of private households, and the rental value of owner-occupied dwellings. Nonfarm business also excludes farming. Private business and private nonfarm business further exclude government enterprises. The measures are supplied by the U.S. Department of Commerce's Bureau of Economic Analysis. Annual estimates of manufacturing sectoral output are produced by the Bureau of Labor Statistics. Quarterly manufacturing output indexes from the Federal Reserve Board are adjusted to these annual output measures by the BLS. Compensation data are developed from data of the Bureau of Economic Analysis and the Bureau of Labor Statistics. Hours data are developed from data of the Bureau of Labor Statistics.

The productivity and associated cost mea-

sures in tables 39–42 describe the relationship between output in real terms and the labor and capital inputs involved in its production. They show the changes from period to period in the amount of goods and services produced per unit of input.

Although these measures relate output to hours and capital services, they do not measure the contributions of labor, capital, or any other specific factor of production. Rather, they reflect the joint effect of many influences, including changes in technology; shifts in the composition of the labor force; capital investment; level of output; changes in the utilization of capacity, energy, material, and research and development; the organization of production; managerial skill; and characteristics and efforts of the work force.

FOR ADDITIONAL INFORMATION on this productivity series, contact the Division of Productivity Research: (202) 691–5606.

Industry productivity measures

Description of the series

The BLS industry productivity data supplement the measures for the business economy and major sectors with annual measures of labor productivity for selected industries at the three- and four-digit levels of the Standard Industrial Classification system. The industry measures differ in methodology and data sources from the productivity measures for the major sectors because the industry measures are developed independently of the National Income and Product Accounts framework used for the major sector measures.

Definitions

Output per hour is derived by dividing an index of industry output by an index of labor input. For most industries, **output** indexes are derived from data on the value of industry output adjusted for price change. For the remaining industries, output indexes are derived from data on the physical quantity of production.

The **labor input** series consist of the hours of all employees (production and nonproduction workers), the hours of all persons (paid employees, partners, proprietors, and unpaid family workers), or the number of employees, depending upon the industry.

Notes on the data

The industry measures are compiled from data produced by the Bureau of Labor Statistics, the Departments of Commerce, Interior, and Agriculture, the Federal Reserve Board, regulatory agencies, trade associations, and other sources.

For most industries, the productivity indexes refer to the output per hour of all employees. For some transportation industries, only indexes of output per employee are prepared. For some trade and service industries, indexes of output per hour of all persons (including self-employed) are constructed.

FOR ADDITIONAL INFORMATION on this series, contact the Division of Industry Productivity Studies: (202) 691–5618.

International Comparisons

(Tables 43–45)

Labor force and unemployment

Description of the series

Tables 43 and 44 present comparative measures of the labor force, employment, and unemployment—approximating U.S. concepts—for the United States, Canada, Australia, Japan, and several European countries. The unemployment statistics (and, to a lesser extent, employment statistics) published by other industrial countries are not, in most cases, comparable to U.S. unemployment statistics. Therefore, the Bureau adjusts the figures for selected countries, where necessary, for all known major definitional differences. Although precise comparability may not be achieved, these adjusted figures provide a better basis for international comparisons than the figures regularly published by each country.

Definitions

For the principal U.S. definitions of the **labor force**, **employment**, and **unemployment**, see the Notes section on Employment and Unemployment Data: Household survey data.

Notes on the data

The adjusted statistics have been adapted to the age at which compulsory schooling ends in each country, rather than to the U.S. standard of 16 years of age and older. Therefore, the adjusted statistics relate to the population aged 16 and older in France, Sweden, and the United Kingdom; 15 and older in Canada, Australia, Japan, Germany, Italy from 1993 onward, and the Netherlands; and 14 and older in Italy prior to 1993. The institutional population is included in the denominator of the labor force participation rates and employment-population ratios for Japan and Germany; it is excluded for the United States and the other countries.

In the U.S. labor force survey, persons on layoff who are awaiting recall to their jobs are classified as unemployed. European and Japanese layoff practices are quite different in nature from those in the United States; therefore, strict application of the U.S. definition has not been made on this point. For further information, see *Monthly Labor Review*, December 1981, pp. 8–11.

The figures for one or more recent years for France, Germany, Italy, the Netherlands, and the United Kingdom are calculated using adjustment factors based on labor force surveys for earlier years and are considered preliminary. The recent-year measures for these countries, therefore, are subject to revision whenever data from more current labor force surveys become available.

There are breaks in the data series for the United States (1990, 1994, 1997, 1998), France (1992), Italy (1991, 1993), the Netherlands (1988), and Sweden (1987).

For the United States, the break in series reflects a major redesign of the labor force survey questionnaire and collection methodology introduced in January 1994. Revised population estimates based on the 1990 census, adjusted for the estimated undercount, also were incorporated. In 1996, previously published data for the 1990–93 period were revised to reflect the 1990 census-based population controls, adjusted for the undercount. In 1997, revised population controls were introduced into the household survey. Therefore, the data are not strictly conparable with prior years. In 1998, new composite estimation procedures and minor revisions in population controls were introduced into the household survey. Therefore, the data are not strictly comparable with data for 1997 and earlier years. See the Notes section on Employment and Unemployment Data of this *Review*.

For France, the 1992 break reflects the substitution of standardized European Union Statistical Office (EUROSTAT) unemployment statistics for the unemployment data estimated according to the International Labor Office (ILO) definition and published in the Organization for Economic Cooperation and Development (OECD) annual yearbook and quarterly update. This change was made because the EUROSTAT data are more up-to-date than the OECD figures. Also, since 1992, the EUROSTAT definitions are closer to the U.S. definitions than they were in prior years. The impact of this revision was to lower the unemployment rate by 0.1 percentage point in 1992 and 1993, by 0.4 percentage point in 1994, and 0.5 percentage point in 1995.

For Italy, the 1991 break reflects a revision in the method of weighting sample data. The impact was to increase the unemployment rate by approximately 0.3 percentage point, from 6.6 to 6.9 percent in 1991.

In October 1992, the survey methodology was revised and the definition of unemployment was changed to include only those who were actively looking for a job within the 30 days preceding the survey and who were available for work. In addition, the lower age limit for the labor force was raised from 14 to 15 years. (Prior to these changes, BLS adjusted Italy's published unemployment rate downward by excluding from the unemployed those persons who had not actively sought work in the past 30 days.) The break in the series also reflects the incorporation of the 1991 population census results. The impact of these changes was to raise Italy's adjusted unemployment rate by approximately 1.2 percentage points, from 8.3 to 9.5 percent in fourth-quarter 1992. These changes did not affect employment significantly, except in 1993. Estimates by the Italian Statistical Office indicate that employment declined by about 3 percent in 1993, rather than the nearly 4 percent indicated by the data shown in table 44. This difference is attributable mainly to the incorporation of the 1991 population benchmarks in the 1993 data. Data for earlier years have not been adjusted to incorporate the 1991 census results.

For the Netherlands, a new survey questionnaire was introduced in 1992 that allowed for a closer application of ILO guidelines. EUROSTAT has revised the Dutch series back to 1988 based on the 1992 changes. The 1988 revised unemployment rate is 7.6 percent; the previous estimate for the same year was 9.3 percent.

There have been two breaks in series in the Swedish labor force survey, in 1987 and 1993. Adjustments have been made for the 1993 break back to 1987. In 1987, a new questionnaire was introduced. Questions regarding current availability were added and the period of active workseeking was reduced from 60 days to 4 weeks. These changes lowered Sweden's 1987 unemployment rate by 0.4 percentage point, from 2.3 to 1.9 percent. In 1993, the measurement period for the labor force survey was changed to represent all 52 weeks of the year rather than one week each month and a new adjustment for population totals was introduced. The impact was to raise the unemployment rate by approximately 0.5 percentage point, from 7.6 to 8.1 percent. Statistics Sweden revised its labor force survey data for 1987–92 to take into account the break in 1993. The adjustment raised the Swedish unemployment rate by 0.2 percentage point in 1987 and gradually rose to 0.5 percentage point in 1992.

Beginning with 1987, BLS has adjusted the Swedish data to classify students who also sought work as unemployed. The impact of this change was to increase the adjusted unemployment rate by 0.1 percentage point in 1987 and by 1.8 percentage points in 1994, when unemployment was higher. In 1998, the adjusted unemployment rate had risen from 6.5 to 8.4 percent due to the adjustment to include students.

The net effect of the 1987 and 1993 changes and the BLS adjustment for students seeking work lowered Sweden's 1987 unemployment rate from 2.3 to 2.2 percent.

FOR ADDITIONAL INFORMATION on this series, contact the Division of Foreign Labor Statistics: (202) 691–5654.

Manufacturing productivity and labor costs

Description of the series

Table 45 presents comparative indexes of manufacturing labor productivity (output per hour), output, total hours, compensation per hour, and unit labor costs for the United States, Canada, Japan, and nine European countries. These measures are trend comparisons—that is, series that measure changes over time—rather than level comparisons. There are greater technical problems in comparing the levels of manufacturing output among countries.

BLS constructs the comparative indexes from three basic aggregate measures—output, total labor hours, and total compensation. The hours and compensation measures refer to all employed persons (wage and salary earners plus self-employed persons and unpaid family workers) in the United States, Canada, Japan, France, Germany, Norway, and Sweden, and to all employees (wage and salary earners) in the other countries.

Definitions

Output, in general, refers to value added in manufacturing from the national accounts of each country. However, the output series for Japan prior to 1970 is an index of industrial production, and the national accounts measures for the United Kingdom are essentially identical to their indexes of industrial production.

The 1977–97 output data for the United States are the gross product originating (value added) measures prepared by the Bureau of Economic Analysis of the U.S. Department of Commerce. Comparable manufacturing output data currently are not available prior to 1977.

U.S. gross product originating is a chain-type annual-weighted series. (For more information on the U.S. measure, see Robert E. Yuskavage, "Improved Estimates of Gross Product by Industry, 1959–94," *Survey of Current Business*, August 1996, pp. 133–55.) The Japanese value added series is based upon one set of fixed price weights for the years 1970 through 1997. Output series for the other foreign economies also employ fixed price weights, but the weights are updated periodically (for example, every 5 or 10 years).

To preserve the comparability of the U.S. measures with those for other economies, BLS uses gross product originating in manufacturing for the United States for these comparative measures. The gross product originating series differs from the manufacturing output series that BLS publishes in its news releases on quarterly measures of U.S. productivity and costs (and that underlies the measures that appear in tables 39 and 41 in this section). The quarterly measures are on a "sectoral output" basis, rather than a value-added basis. Sectoral output is gross output less intrasector transactions.

Total labor hours refers to hours worked in all countries. The measures are developed from statistics of manufacturing employment and average hours. The series used for France (from 1970 forward), Norway, and Sweden are official series published with the national accounts. Where official total hours series are not available, the measures are developed by BLS using employment figures published with the national accounts, or other comprehensive employment series, and estimates of annual hours worked. For Germany, BLS uses estimates of average hours worked developed by a research institute connected to the Ministry of Labor for use with the national accounts employment figures. For the other countries, BLS constructs its own estimates of average hours.

Denmark has not published estimates of average hours for 1994–97; therefore, the BLS measure of labor input for Denmark ends in 1993.

Total compensation (labor cost) includes all payments in cash or in-kind made directly to employees plus employer expenditures for legally required insurance programs and contractual and private benefit plans. The measures are from the national accounts of each country, except those for Belgium, which are developed by BLS using statistics on employment, average hours, and hourly compensation. For Canada, France, and Sweden, compensation is increased to account for other significant taxes on payroll or employment. For the United Kingdom, compensation is reduced between 1967 and 1991 to account for employment-related subsidies. Self-employed workers are included in the all-employed-persons measures by assuming that their hourly compensation is equal to the average for wage and salary employees.

Notes on the data

In general, the measures relate to total manufacturing as defined by the International Stan-

dard Industrial Classification. However, the measures for France (for all years) and Italy (beginning 1970) refer to mining and manufacturing less energy-related products, and the measures for Denmark include mining and exclude manufacturing handicrafts from 1960 to 1966.

The measures for recent years may be based on current indicators of manufacturing output (such as industrial production indexes), employment, average hours, and hourly compensation until national accounts and other statistics used for the long-term measures become available.

FOR ADDITIONAL INFORMATION on this series, contact the Division of Foreign Labor Statistics.

Occupational Injury and Illness Data

(Tables 46–47)

Survey of Occupational Injuries and Illnesses

Description of the series

The Survey of Occupational Injuries and Illnesses collects data from employers about their workers' job-related nonfatal injuries and illnesses. The information that employers provide is based on records that they maintain under the Occupational Safety and Health Act of 1970. Self-employed individuals, farms with fewer than 11 employees, employers regulated by other Federal safety and health laws, and Federal, State, and local government agencies are excluded from the survey.

The survey is a Federal-State cooperative program with an independent sample selected for each participating State. A stratified random sample with a Neyman allocation is selected to represent all private industries in the State. The survey is stratified by Standard Industrial Classification and size of employment.

Definitions

Under the Occupational Safety and Health Act, employers maintain records of nonfatal work-related injuries and illnesses that involve one or more of the following: loss of consciousness, restriction of work or motion, transfer to another job, or medical treatment other than first aid.

Occupational injury is any injury such as a cut, fracture, sprain, or amputation that results from a work-related event or a single, instantaneous exposure in the work environment.

Occupational illness is an abnormal condition or disorder, other than one resulting from an occupational injury, caused by exposure to factors associated with employment. It includes acute and chronic illnesses or disease which may be caused by inhalation, absorption, ingestion, or direct contact.

Lost workday injuries and illnesses are cases that involve days away from work, or days of restricted work activity, or both.

Lost workdays include the number of workdays (consecutive or not) on which the employee was either away from work or at work in some restricted capacity, or both, because of an occupational injury or illness. BLS measures of the number and incidence rate of lost workdays were discontinued beginning with the 1993 survey. The number of days away from work or days of restricted work activity does not include the day of injury or onset of illness or any days on which the employee would not have worked, such as a Federal holiday, even though able to work.

Incidence rates are computed as the number of injuries and/or illnesses or lost work days per 100 full-time workers.

Notes on the data

The definitions of occupational injuries and illnesses are from *Recordkeeping Guidelines for Occupational Injuries and Illnesses* (U.S. Department of Labor, Bureau of Labor Statistics, September 1986).

Estimates are made for industries and employment size classes for total recordable cases, lost workday cases, days away from work cases, and nonfatal cases without lost workdays. These data also are shown separately for injuries. Illness data are available for seven categories: occupational skin diseases or disorders, dust diseases of the lungs, respiratory conditions due to toxic agents, poisoning (systemic effects of toxic agents), disorders due to physical agents (other than toxic materials), disorders associated with repeated trauma, and all other occupational illnesses.

The survey continues to measure the number of new work-related illness cases which are recognized, diagnosed, and reported during the year. Some conditions, for example, long-term latent illnesses caused by exposure to carcinogens, often are difficult to relate to the workplace and are not adequately recognized and reported. These long-term latent illnesses are believed to be understated in the survey's illness measure. In contrast, the overwhelming majority of the reported new illnesses are those which are easier to directly relate to workplace activity (for example, contact dermatitis and carpal tunnel syndrome).

Most of the estimates are in the form of incidence rates, defined as the number of injuries and illnesses per 100 equivalent full-time workers. For this purpose, 200,000 employee hours represent 100 employee years (2,000 hours per employee). Full detail on the available measures is presented in the annual bulletin, *Occupational Injuries and Illnesses: Counts, Rates, and Characteristics.*

Comparable data for more than 40 States and territories are available from the BLS Office of Safety, Health and Working Conditions. Many of these States publish data on State and local government employees in addition to private industry data.

Mining and railroad data are furnished to BLS by the Mine Safety and Health Administration and the Federal Railroad Administration. Data from these organizations are included in both the national and State data published annually.

With the 1992 survey, BLS began publishing details on serious, nonfatal incidents resulting in days away from work. Included are some major characteristics of the injured and ill workers, such as occupation, age, gender, race, and length of service, as well as the circumstances of their injuries and illnesses (nature of the disabling condition, part of body affected, event and exposure, and the source directly producing the condition). In general, these data are available nationwide for detailed industries and for individual States at more aggregated industry levels.

FOR ADDITIONAL INFORMATION on occupational injuries and illnesses, contact the Office of Occupational Safety, Health and Working Conditions at (202) 691–6180, or access the Internet at:

http://www.bls.gov/oshhome.htm

Census of Fatal Occupational Injuries

The Census of Fatal Occupational Injuries compiles a complete roster of fatal job-related injuries, including detailed data about the fatally injured workers and the fatal events. The program collects and cross checks fatality information from multiple sources, including death certificates, State and Federal workers' compensation reports, Occupational Safety and Health Administration and Mine Safety and Health Administration records, medical examiner and autopsy reports, media accounts, State motor vehicle fatality records, and follow-up questionnaires to employers.

In addition to private wage and salary workers, the self-employed, family members, and Federal, State, and local government workers are covered by the program. To be included in the fatality census, the decedent must have been employed (that is working for pay, compensation, or profit) at the time of the event, engaged in a legal work activity, or present at the site of the incident as a requirement of his or her job.

Definition

A fatal work injury is any intentional or unintentional wound or damage to the body resulting in death from acute exposure to energy, such as heat or electricity, or kinetic energy from a crash, or from the absence of such essentials as heat or oxygen caused by a specific event or incident or series of events within a single workday or shift. Fatalities that occur during a person's commute to or from work are excluded from the census, as well as work-related illnesses, which can be difficult to identify due to long latency periods.

Notes on the data

Twenty-eight data elements are collected, coded, and tabulated in the fatality program, including information about the fatally injured worker, the fatal incident, and the machinery or equipment involved. Summary worker demographic data and event characteristics are included in a national news release that is available about 8 months after the end of the reference year. The Census of Fatal Occupational Injuries was initiated in 1992 as a joint Federal-State effort. Most States issue summary information at the time of the national news release.

FOR ADDITIONAL INFORMATION on the Census of Fatal Occupational Injuries contact the BLS Office of Safety, Health, and Working Conditions at (202) 691–6175, or the Internet at:

http://www.bls.gov/oshhome.htm

Bureau of Labor Statistics Internet

The Bureau of Labor Statistics World Wide Web site on the Internet contains a range of data on consumer and producer prices, employment and unemployment, occupational compensation, employee benefits, workplace injuries and illnesses, and productivity. The homepage can be accessed using any Web browser:

http://stats.bls.gov

Also, some data can be accessed through anonymous FTP or Gopher at

stats.bls.gov

1. Labor market indicators

Selected indicators	1998	1999	1998				1999				2000
			I	II	III	IV	I	II	III	IV	I
Employment data											
Employment status of the civilian noninstitutionalized population (household survey):[1]											
Labor force participation rate	67.1	67.1	67.2	67.0	67.0	67.1	67.2	67.1	67.0	67.0	67.5
Employment-population ratio	64.1	64.3	64.0	64.1	64.0	64.1	64.3	64.2	64.2	64.3	64.7
Unemployment rate	4.5	4.2	4.7	4.4	4.5	4.4	4.3	4.3	4.2	4.1	4.1
Men	4.4	4.1	4.6	4.3	4.5	4.3	4.2	4.2	4.1	4.0	4.0
16 to 24 years	11.1	10.3	11.4	10.7	11.5	10.6	10.4	10.4	10.0	10.4	9.7
25 years and over	3.2	3.0	3.3	3.1	3.2	3.1	3.0	3.0	3.0	2.9	2.9
Women	4.6	4.3	4.8	4.6	4.5	4.6	4.4	4.4	4.4	4.2	4.2
16 to 24 years	9.8	9.5	10.0	9.7	9.9	9.4	9.8	9.2	9.5	9.4	9.6
25 years and over	3.6	3.3	3.8	3.6	3.5	3.6	3.4	3.4	3.3	3.1	3.2
Employment, nonfarm (payroll data), in thousands:[1]											
Total	125,826	128,615	124,771	125,462	126,113	126,865	127,640	128,246	128,936	129,606	130,435
Private sector	106,007	108,455	105,094	105,707	106,260	106,920	107,596	108,153	108,743	109,333	110,008
Goods-producing	25,347	25,240	25,363	25,393	25,306	25,319	25,310	25,222	25,194	25,246	25,421
Manufacturing	18,772	18,432	18,876	18,851	18,719	18,645	18,542	18,433	18,398	18,359	18,366
Service-producing	100,480	103,375	99,409	100,070	100,807	101,545	102,331	103,024	103,743	104,360	105,014
Average hours:											
Private sector	34.6	34.5	34.7	34.6	34.6	34.6	34.6	34.4	34.5	34.5	34.5
Manufacturing	41.7	41.7	42.0	41.7	41.7	41.7	41.6	41.7	41.8	41.7	41.7
Overtime	4.6	4.6	4.8	4.6	4.5	4.5	4.5	4.5	4.7	4.6	4.7
Employment Cost Index[2]											
Percent change in the ECI, compensation:											
All workers (excluding farm, household and Federal workers)	3.4	3.4	.8	.8	1.2	.6	.4	1.0	1.1	.9	–
Private industry workers	3.5	3.4	.9	.9	1.1	.6	.4	1.1	.9	.9	–
Goods-producing [3]	2.8	3.4	.7	.8	.7	.5	.8	.7	.9	1.0	–
Service-producing [3]	3.8	3.4	1.0	.8	1.3	.6	.3	1.3	.9	.8	–
State and local government workers	3.0	3.4	.6	.3	1.5	.6	.5	.4	1.5	1.0	–
Workers by bargaining status (private industry):											
Union	3.0	2.7	.4	1.0	1.1	.5	.4	.7	.9	.7	–
Nonunion	3.5	3.6	1.0	.8	1.1	.6	.5	1.2	.9	1.0	–

[1] Quarterly data seasonally adjusted.

[2] Annual changes are December-to-December changes. Quarterly changes are calculated using the last month of each quarter.

[3] Goods-producing industries include mining, construction, and manufacturing. Service-producing industries include all other private sector industries.

NOTE: Dash indicates data not available.

2. Annual and quarterly percent changes in compensation, prices, and productivity

Selected measures	1998	1999	1997	1998				1999			
			IV	I	II	III	IV	I	II	III	IV
Compensation data[1,2]											
Employment Cost Index—compensation (wages, salaries, benefits):											
Civilian nonfarm	3.4	3.4	0.8	0.8	0.8	1.2	0.6	0.4	1.0	1.1	0.9
Private nonfarm	3.5	3.4	.9	.9	.9	1.1	.6	.4	1.1	.9	.9
Employment Cost Index—wages and salaries:											
Civilian nonfarm	3.7	3.5	.9	.9	.7	1.3	.7	.5	1.0	1.1	.8
Private nonfarm	3.9	3.5	1.0	1.1	.9	1.3	.6	.5	1.2	.9	.9
Price data[1]											
Consumer Price Index (All Urban Consumers): All Items	1.6	2.7	.1	.6	.5	.4	.2	.7	.7	1.0	.2
Producer Price Index:											
Finished goods	.0	3.0	–.5	–.8	.5	–.1	.4	.0	1.2	1.5	.2
Finished consumer goods	.0	3.9	–.8	–1.0	.8	.0	.2	.0	1.8	2.2	–.1
Capital equipment	.0	.3	.5	.0	–.5	–.4	.9	–.1	–.4	–.4	1.2
Intermediate materials, supplies, and components	–3.3	3.9	–.8	–1.4	.2	–.5	–1.6	–.2	1.9	1.9	.2
Crude materials	–16.7	15.7	–.6	–8.8	–1.8	–5.6	–2.5	–.1	9.4	10.2	–3.2
Productivity data[3]											
Output per hour of all persons:											
Business sector	2.8	3.1	1.2	4.6	.6	3.4	4.3	3.0	.8	4.7	6.1
Nonfarm business sector	2.8	3.0	1.2	4.4	.9	3.1	4.1	2.7	.6	5.0	6.4
Nonfinancial corporations[4]	4.0	–	2.8	3.7	3.9	5.9	3.2	4.2	3.3	4.1	–

[1] Annual changes are December-to-December changes. Quarterly changes are calculated using the last month of each quarter. Compensation and price data are not seasonally adjusted, and the price data are not compounded.

[2] Excludes Federal and private household workers.

[3] Annual rates of change are computed by comparing annual averages. Quarterly percent changes reflect annual rates of change in quarterly indexes. The data are seasonally adjusted.

[4] Output per hour of all employees.

NOTE: Dash indicates data not available.

3. Alternative measures of wage and compensation changes

Components	Quarterly average						Four quarters ending—					
	1998		1999				1998		1999			
	III	IV	I	II	III	IV	III	IV	I	II	III	IV
Average hourly compensation:[1]												
All persons, business sector	6.1	4.9	4.9	5.1	4.5	3.3	5.8	5.4	5.4	5.3	4.9	4.5
All persons, nonfarm business sector	6.2	4.6	4.2	4.8	4.7	3.7	5.7	5.3	5.1	4.9	4.6	4.3
Employment Cost Index—compensation:												
Civilian nonfarm[2]	1.2	.6	.4	1.0	1.1	.9	3.7	3.4	3.0	3.2	3.1	3.4
Private nonfarm	1.1	.6	.4	1.1	.9	.9	3.8	3.5	3.0	3.3	3.1	3.4
Union	1.1	.5	.4	.7	.9	.7	2.7	3.0	3.0	2.7	2.5	2.7
Nonunion	1.1	.6	.5	1.2	.9	1.0	4.0	3.5	3.0	3.4	3.2	3.6
State and local governments	1.5	.6	.5	.4	1.5	1.0	3.0	3.0	2.9	3.0	2.9	3.4
Employment Cost Index—wages and salaries:												
Civilian nonfarm[2]	1.3	.7	.5	1.0	1.1	.8	4.0	3.7	3.3	3.6	3.3	3.5
Private nonfarm	1.3	.6	.5	1.2	.9	.9	4.3	3.9	3.3	3.6	3.2	3.5
Union	1.3	.5	.4	.8	.7	.6	3.2	3.3	3.1	3.1	2.5	2.6
Nonunion	1.3	.7	.5	1.2	.9	.9	4.4	4.0	3.3	3.7	3.3	3.6
State and local governments	1.6	.7	.4	.4	1.9	.9	3.0	3.1	2.9	3.1	3.3	3.6

[1] Seasonally adjusted. "Quarterly average" is percent change from a quarter ago, at an annual rate.

[2] Excludes Federal and household workers.

4. Employment status of the population, by sex, age, race, and Hispanic origin, monthly data seasonally adjusted

[Numbers in thousands]

Employment status	Annual average		1999										2000		
	1998	1999	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
TOTAL															
Civilian noninstitutional population[1]	205,220	207,753	207,036	207,236	207,427	207,632	207,828	208,038	208,265	208,483	208,666	208,832	208,782	208,907	209,053
Civilian labor force	137,673	139,368	138,804	139,086	139,013	139,332	139,336	139,372	139,475	139,697	139,834	140,108	140,910	141,165	140,867
Participation rate	67.1	67.1	67.0	67.1	67.0	67.1	67.0	67.0	67.0	67.0	67.0	67.1	67.5	67.6	67.4
Employed	131,463	133,488	132,976	133,054	133,190	133,398	133,399	133,530	133,650	133,940	134,098	134,420	135,221	135,362	135,159
Employment-population ratio[2]	64.1	64.3	64.2	64.2	64.2	64.2	64.2	64.2	64.2	64.2	64.3	64.4	64.8	64.8	64.7
Unemployed	6,210	5,880	5,828	6,032	5,823	5,934	5,937	5,842	5,825	5,757	5,736	5,688	5,689	5,804	5,708
Unemployment rate	4.5	4.2	4.2	4.3	4.2	4.3	4.3	4.2	4.2	4.1	4.1	4.1	4.0	4.1	4.1
Not in the labor force	67,547	68,385	68,232	68,150	68,414	68,300	68,492	68,666	68,790	68,786	68,832	68,724	67,872	67,742	68,187
Men, 20 years and over															
Civilian noninstitutional population[1]	90,790	91,555	91,215	91,302	91,368	91,487	91,561	91,692	91,793	91,896	91,986	92,052	92,057	92,092	92,145
Civilian labor force	69,715	70,194	69,934	69,992	69,978	70,116	70,167	70,240	70,328	70,339	70,388	70,529	70,917	71,120	70,822
Participation rate	76.8	76.7	76.7	76.7	76.6	76.6	76.6	76.6	76.6	76.5	76.5	76.6	77.0	77.2	76.9
Employed	67,135	67,761	67,628	67,562	67,470	67,645	67,703	67,768	67,943	67,898	68,037	68,197	68,585	68,691	68,480
Employment-population ratio[2]	73.9	74.0	74.1	74.0	73.8	73.9	73.9	73.9	74.0	73.9	74.0	74.1	74.5	74.6	74.3
Agriculture	2,350	2,244	2,239	2,305	2,224	2,246	2,256	2,237	2,189	2,206	2,262	2,227	2,303	2,309	2,232
Nonagricultural industries	64,785	65,517	65,389	65,257	65,246	65,399	65,447	65,531	65,754	65,692	65,775	65,970	66,282	66,382	66,249
Unemployed	2,580	2,433	2,306	2,430	2,508	2,471	2,464	2,472	2,385	2,441	2,351	2,332	2,332	2,429	2,342
Unemployment rate	3.7	3.5	3.3	3.5	3.6	3.5	3.5	3.5	3.4	3.5	3.3	3.3	3.3	3.4	3.3
Women, 20 years and over															
Civilian noninstitutional population[1]	98,786	100,158	99,833	99,923	100,008	100,131	100,203	100,285	100,385	100,458	100,573	100,666	100,579	100,666	100,713
Civilian labor force	59,702	60,840	60,554	60,765	60,708	60,988	60,852	60,904	60,860	60,955	61,052	61,154	61,576	61,575	61,671
Participation rate	60.4	60.7	60.7	60.8	60.7	60.9	60.7	60.7	60.6	60.7	60.7	60.7	61.2	61.2	61.2
Employed	57,278	58,555	58,216	58,336	58,483	58,647	58,477	58,648	58,630	58,800	58,838	58,958	59,280	59,398	59,422
Employment-population ratio[2]	58.0	58.5	58.3	58.4	58.5	58.6	58.4	58.5	58.4	58.5	58.5	58.6	58.9	59.0	59.0
Agriculture	768	803	821	803	820	851	798	780	778	800	768	791	826	871	894
Nonagricultural industries	56,510	57,752	57,395	57,533	57,663	57,796	57,679	57,868	57,852	58,000	58,070	58,167	58,454	58,526	58,528
Unemployed	2,424	2,285	2,338	2,429	2,225	2,341	2,375	2,256	2,230	2,155	2,214	2,196	2,297	2,178	2,249
Unemployment rate	4.1	3.8	3.9	4.0	3.7	3.8	3.9	3.7	3.7	3.5	3.6	3.6	3.7	3.5	3.6
Both sexes, 16 to 19 years															
Civilian noninstitutional population[1]	15,644	16,040	15,988	16,011	16,051	16,014	16,065	16,061	16,086	16,129	16,107	16,114	16,147	16,149	16,196
Civilian labor force	8,256	8,333	8,316	8,329	8,327	8,228	8,317	8,228	8,287	8,403	8,394	8,425	8,416	8,470	8,374
Participation rate	52.8	52.0	52.0	52.0	51.9	51.4	51.8	51.2	51.5	52.1	52.1	52.3	52.1	52.4	51.7
Employed	7,051	7,172	7,132	7,156	7,237	7,106	7,219	7,114	7,077	7,242	7,223	7,265	7,356	7,273	7,257
Employment-population ratio[2]	45.1	44.7	44.6	44.7	45.1	44.4	44.9	44.3	44.0	44.9	44.8	45.1	45.6	45.0	44.8
Agriculture	261	234	230	233	246	233	224	217	212	232	280	261	242	228	233
Nonagricultural industries	6,790	6,938	6,902	6,923	6,991	6,873	6,995	6,897	6,865	7,010	6,943	7,004	7,114	7,046	7,024
Unemployed	1,205	1,162	1,184	1,173	1,090	1,122	1,098	1,114	1,210	1,161	1,171	1,160	1,060	1,197	1,117
Unemployment rate	14.6	13.9	14.2	14.1	13.1	13.6	13.2	13.5	14.6	13.8	14.0	13.8	12.6	14.1	13.3
White															
Civilian noninstitutional population[1]	171,478	173,085	172,597	172,730	172,859	172,999	173,133	173,275	173,432	173,585	173,709	173,821	173,812	173,886	173,983
Civilian labor force	115,415	116,509	116,237	116,344	116,193	116,518	116,492	116,619	116,495	116,654	116,703	117,008	117,716	117,821	117,832
Participation rate	67.3	67.3	67.3	67.4	67.2	67.4	67.3	67.3	67.2	67.2	67.2	67.3	67.7	67.8	67.7
Employed	110,931	112,235	112,030	111,886	111,898	112,115	112,193	112,308	112,303	112,548	112,611	112,951	113,704	113,634	113,630
Employment-population ratio[2]	64.7	64.8	64.9	64.8	64.7	64.8	64.8	64.8	64.8	64.8	64.8	65.0	65.4	65.3	65.3
Unemployed	4,484	4,273	4,207	4,458	4,295	4,403	4,299	4,311	4,192	4,106	4,092	4,057	4,011	4,187	4,202
Unemployment rate	3.9	3.7	3.6	3.8	3.7	3.8	3.7	3.7	3.6	3.5	3.5	3.5	3.4	3.6	3.6
Black															
Civilian noninstitutional population[1]	24,373	24,855	24,729	24,765	24,798	24,833	24,867	24,904	24,946	24,985	25,019	25,051	25,047	25,076	25,105
Civilian labor force	15,982	16,365	16,231	16,288	16,290	16,308	16,366	16,321	16,474	16,489	16,508	16,513	16,622	16,785	16,572
Participation rate	65.6	65.8	65.6	65.8	65.7	65.7	65.8	65.5	66.0	66.0	66.0	65.9	66.4	66.9	66.0
Employed	14,556	15,056	14,925	15,011	15,053	15,069	14,962	15,047	15,114	15,124	15,187	15,204	15,254	15,471	15,356
Employment-population ratio[2]	59.7	60.6	60.4	60.6	60.7	60.7	60.2	60.4	60.6	60.5	60.7	60.7	60.9	61.7	61.2
Unemployed	1,426	1,309	1,306	1,277	1,237	1,239	1,404	1,274	1,360	1,365	1,321	1,309	1,368	1,314	1,216
Unemployment rate	8.9	8.0	8.0	7.8	7.6	7.6	8.6	7.8	8.3	8.3	8.0	7.9	8.2	7.8	7.3

See footnotes at end of table.

4. Continued—Employment status of the population, by sex, age, race, and Hispanic origin, monthly data seasonally adjusted

[Numbers in thousands]

Employment status	Annual average		1999										2000		
	1998	1999	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
Hispanic origin															
Civilian noninstitutional population[1]	21,070	21,650	21,414	21,483	21,548	21,618	21,684	21,752	21,820	21,881	21,947	22,008	22,047	22,108	22,166
Civilian labor force	14,317	14,665	14,542	14,535	14,555	14,624	14,617	14,710	14,766	14,809	14,887	14,984	15,251	15,249	15,313
Participation rate	67.9	67.7	67.9	67.7	67.5	67.6	67.4	67.6	67.7	67.7	67.8	68.1	69.2	69.0	69.1
Employed	13,291	13,720	13,673	13,541	13,574	13,655	13,696	13,759	13,795	13,879	13,979	14,095	14,395	14,382	14,355
Employment-population ratio[2]	63.1	63.4	63.8	63.0	63.0	63.2	63.2	63.3	63.2	63.4	63.7	64.0	65.3	65.1	64.8
Unemployed	1,026	945	869	994	981	969	921	951	971	930	908	889	856	868	958
Unemployment rate	7.2	6.4	6.0	6.8	6.7	6.6	6.3	6.5	6.6	6.3	6.1	5.9	5.6	5.7	6.3

[1] The population figures are not seasonally adjusted.

[2] Civilian employment as a percent of the civilian noninstitutional population.

NOTE: Detail for the above race and Hispanic-origin groups will not sum to totals because data for the "other races" groups are not presented and Hispanics are included in both the white and black population groups.

5. Selected employment indicators, monthly data seasonally adjusted

[In thousands]

Selected categories	Annual average		1999										2000		
	1998	1999	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
Characteristic															
Employed, 16 years and over	131,463	133,488	132,976	133,054	133,190	133,398	133,399	133,530	133,650	133,940	134,098	134,420	135,221	135,362	135,159
Men	70,693	71,446	71,269	71,208	71,207	71,330	71,437	71,436	71,630	71,623	71,732	71,927	72,358	72,473	72,313
Women	60,771	62,042	61,707	61,846	61,983	62,068	61,962	62,094	62,020	62,317	62,366	62,493	62,863	62,889	62,846
Married men, spouse present	42,923	43,254	43,164	43,210	42,997	43,279	43,350	43,368	43,367	43,206	43,273	43,283	43,951	43,535	43,297
Married women, spouse present	32,872	33,450	33,167	33,284	33,442	33,758	33,387	33,504	33,275	33,521	33,635	33,762	34,166	33,882	33,780
Women who maintain families	7,904	8,229	8,142	8,081	8,081	8,028	8,272	8,335	8,312	8,398	8,526	8,375	8,362	8,220	8,082
Class of worker															
Agriculture:															
Wage and salary workers	2,000	1,944	1,905	1,930	1,930	1,923	1,939	1,908	1,930	1,936	2,049	2,018	2,024	2,025	2,043
Self-employed workers	1,341	1,297	1,358	1,399	1,330	1,341	1,292	1,266	1,198	1,267	1,216	1,211	1,320	1,344	1,292
Unpaid family workers	38	40	39	33	36	39	45	46	40	42	41	36	38	51	42
Nonagricultural industries:															
Wage and salary workers	119,019	121,323	120,939	120,925	121,311	121,006	121,188	121,150	121,583	121,654	121,965	122,426	122,823	123,166	123,169
Government	18,383	18,903	18,778	18,778	18,771	19,007	19,032	19,114	19,080	18,817	18,902	18,959	19,013	19,394	19,598
Private industries	100,637	102,420	102,161	102,147	102,540	101,999	102,156	102,036	102,503	102,837	103,063	103,467	103,810	103,772	103,571
Private households	962	933	926	935	914	983	944	873	1,035	939	944	948	952	1,016	998
Other	99,674	101,487	101,235	101,212	101,626	101,016	101,212	101,163	101,468	101,898	102,119	102,519	102,858	102,756	102,573
Self-employed workers	8,962	8,790	8,730	8,801	8,726	8,840	8,820	9,000	8,791	8,833	8,686	8,662	8,802	8,793	8,704
Unpaid family workers	103	95	127	65	61	88	77	93	100	101	108	98	92	74	107
Persons at work part time[1]															
All industries:															
Part time for economic reasons	3,665	3,357	3,509	3,403	3,399	3,377	3,316	3,279	3,283	3,179	3,274	3,320	3,219	3,139	3,124
Slack work or business conditions	2,095	1,968	2,018	1,937	1,950	2,048	1,974	1,904	1,922	1,928	1,930	1,951	1,893	1,807	1,820
Could only find part-time work	1,258	1,079	1,181	1,117	1,116	1,045	1,050	1,057	1,073	993	1,032	1,025	1,012	1,023	953
Part time for noneconomic reasons	18,530	18,758	18,622	18,752	18,692	18,716	18,983	19,230	18,801	18,799	18,651	18,618	18,889	19,031	18,770
Nonagricultural industries:															
Part time for economic reasons	3,501	3,189	3,325	3,225	3,229	3,209	3,142	3,127	3,112	2,983	3,105	3,157	3,066	2,985	3,003
Slack work or business conditions	1,997	1,861	1,927	1,845	1,845	1,902	1,850	1,813	1,806	1,807	1,815	1,843	1,801	1,705	1,766
Could only find part-time work	1,228	1,056	1,128	1,087	1,089	1,031	1,034	1,041	1,063	964	1,013	1,018	966	1,005	922
Part time for noneconomic reasons	17,954	18,197	18,031	18,159	18,138	18,106	18,466	18,652	18,273	18,249	18,083	18,061	18,347	18,406	18,184

[1] Excludes persons "with a job but not at work" during the survey period for such reasons as vacation, illness, or industrial disputes.

6. Selected unemployment indicators, monthly data seasonally adjusted

[Unemployment rates]

Selected categories	Annual average		1999										2000		
	1998	1999	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
Characteristic															
Total, all workers	4.5	4.2	4.2	4.3	4.2	4.3	4.3	4.2	4.2	4.1	4.1	4.1	4.0	4.1	4.1
Both sexes, 16 to 19 years	14.6	13.9	14.2	14.1	13.1	13.6	13.2	13.5	14.6	13.8	14.0	13.8	12.6	14.1	13.3
Men, 20 years and over	3.7	3.5	3.3	3.5	3.6	3.5	3.5	3.5	3.4	3.5	3.3	3.3	3.3	3.4	3.3
Women, 20 years and over	4.1	3.8	3.9	4.0	3.7	3.8	3.9	3.7	3.7	3.5	3.6	3.6	3.7	3.5	3.6
White, total	3.9	3.7	3.6	3.8	3.7	3.8	3.7	3.7	3.6	3.5	3.5	3.5	3.4	3.6	3.6
Both sexes, 16 to 19 years	12.6	12.0	12.0	12.1	11.4	12.0	11.4	11.7	12.3	11.8	12.0	12.2	10.8	12.5	11.7
Men, 16 to 19 years	14.1	12.6	12.8	12.6	12.2	12.0	11.7	12.3	12.7	11.9	12.8	13.3	12.4	14.4	11.3
Women, 16 to 19 years	10.9	11.3	11.2	11.6	10.6	12.0	11.1	11.0	11.9	11.7	11.2	10.9	9.1	10.4	12.1
Men, 20 years and over	3.2	3.0	2.9	3.0	3.1	3.2	3.1	3.2	2.9	2.9	2.8	2.8	2.8	2.9	2.9
Women, 20 years and over	3.4	3.3	3.3	3.6	3.3	3.4	3.3	3.2	3.2	3.1	3.1	3.0	3.1	3.1	3.2
Black, total	8.9	8.0	8.0	7.8	7.6	7.6	8.6	7.8	8.3	8.3	8.0	7.9	8.2	7.8	7.3
Both sexes, 16 to 19 years	27.6	27.9	30.0	27.8	25.2	24.8	26.9	28.1	30.8	30.8	28.4	25.3	23.9	24.3	25.1
Men, 16 to 19 years	30.1	30.9	32.4	32.0	27.9	28.8	30.7	29.6	30.3	35.3	31.0	27.5	24.0	22.3	21.3
Women, 16 to 19 years	25.3	25.1	27.6	23.8	22.5	21.2	23.4	26.7	31.4	26.1	25.9	23.0	23.8	26.6	28.9
Men, 20 years and over	7.4	6.7	6.0	6.3	6.6	6.4	7.2	6.3	7.1	7.7	7.0	7.0	7.4	7.1	6.4
Women, 20 years and over	7.9	6.8	7.1	6.9	6.5	6.7	7.7	6.9	6.7	6.1	6.6	6.7	7.2	6.5	6.1
Hispanic origin, total	7.2	6.4	6.0	6.8	6.7	6.6	6.3	6.5	6.6	6.3	6.1	5.9	5.6	5.7	6.3
Married men, spouse present	2.4	2.2	2.1	2.3	2.3	2.2	2.3	2.3	2.2	2.2	2.1	2.2	2.0	2.1	2.0
Married women, spouse present	2.9	2.7	2.7	2.9	2.6	2.7	2.8	2.7	2.6	2.5	2.5	2.5	2.6	2.6	2.7
Women who maintain families	7.2	6.4	6.6	7.1	6.0	6.5	6.4	6.3	6.4	6.0	6.0	6.2	6.2	6.1	6.8
Full-time workers	4.3	4.1	4.0	4.2	4.0	4.0	4.1	4.1	4.0	4.0	3.9	3.9	3.9	3.9	3.8
Part-time workers	5.3	5.0	5.0	5.0	5.2	5.3	4.9	4.6	5.0	4.7	4.9	4.9	4.6	4.9	5.1
Industry															
Nonagricultural wage and salary workers	4.6	4.3	4.3	4.4	4.3	4.4	4.4	4.2	4.3	4.2	4.2	4.1	4.2	4.2	4.3
Mining	3.2	5.7	5.5	8.4	5.9	4.8	6.0	4.2	6.7	5.0	4.6	4.1	2.6	4.0	2.5
Construction	7.5	7.0	7.0	7.3	7.2	7.3	6.9	7.6	6.9	6.7	5.7	6.6	6.4	7.5	6.9
Manufacturing	3.9	3.6	3.5	3.4	3.5	3.7	3.5	3.8	3.9	3.7	3.7	3.6	3.2	3.3	3.9
Durable goods	3.4	3.5	3.1	3.2	3.4	3.5	3.7	3.7	4.0	3.5	3.7	3.6	2.8	3.0	3.0
Nondurable goods	4.7	3.9	4.2	3.9	3.8	4.0	3.1	4.1	3.9	4.0	3.7	3.5	3.9	3.8	5.2
Transportation and public utilities	3.4	3.0	2.9	2.9	3.2	2.9	3.4	3.0	2.8	3.1	3.3	3.0	3.7	3.2	3.1
Wholesale and retail trade	5.5	5.2	5.4	5.4	5.3	5.3	5.2	4.8	5.2	4.9	5.3	5.2	5.1	5.3	5.4
Finance, insurance, and real estate	2.5	2.3	2.0	3.2	2.2	2.4	2.4	2.4	2.3	2.3	2.3	2.1	2.5	2.9	2.4
Services	4.5	4.1	4.2	4.1	4.0	4.2	4.4	4.0	4.1	4.0	3.9	3.8	4.2	3.7	4.0
Government workers	2.3	2.2	2.1	2.4	2.5	2.3	2.2	2.1	2.0	2.1	2.0	2.1	2.1	2.2	1.7
Agricultural wage and salary workers	8.3	8.9	9.4	9.5	10.1	9.3	9.0	9.6	5.7	7.7	8.3	7.1	5.0	6.5	5.6
Educational attainment[1]															
Less than a high school diploma	7.1	6.7	6.3	6.8	6.8	6.8	6.8	7.0	6.8	6.6	6.5	6.0	6.6	6.0	6.9
High school graduates, no college	4.0	3.5	3.5	3.6	3.6	3.8	3.6	3.5	3.5	3.3	3.3	3.5	3.5	3.5	3.4
Some college, less than a bachelor's degree	3.0	2.8	2.8	2.9	2.8	2.6	3.0	3.1	2.7	2.7	2.7	2.5	2.6	2.9	2.7
College graduates	1.8	1.8	1.9	2.0	1.8	2.0	1.8	1.6	1.7	1.7	1.7	1.8	1.8	1.6	1.6

[1] Data refer to persons 25 years and over.

7. Duration of unemployment, monthly data seasonally adjusted

[Numbers in thousands]

Weeks of unemployment	Annual average		1999										2000		
	1998	1999	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
Less than 5 weeks	2,622	2,568	2,521	2,741	2,502	2,540	2,640	2,599	2,582	2,545	2,601	2,620	2,447	2,603	2,824
5 to 14 weeks	1,950	1,832	1,884	1,868	1,832	1,775	1,778	1,798	1,805	1,811	1,760	1,694	1,754	1,864	1,719
15 weeks and over	1,637	1,480	1,467	1,474	1,519	1,634	1,511	1,463	1,412	1,434	1,401	1,388	1,372	1,277	1,295
15 to 26 weeks	763	755	752	794	784	806	779	747	708	719	725	693	667	673	657
27 weeks and over	875	725	715	680	735	828	732	716	704	715	676	695	705	604	637
Mean duration, in weeks	14.5	13.4	13.6	13.2	13.4	14.3	13.5	13.2	13.0	13.2	13.0	12.9	13.2	12.5	12.8
Median duration, in weeks	6.7	6.4	6.8	6.1	6.6	6.3	5.8	6.4	5.9	6.3	6.2	5.9	5.7	6.1	6.0

8. Unemployed persons by reason for unemployment, monthly data seasonally adjusted

[Numbers in thousands]

Reason for unemployment	Annual average		1999										2000		
	1998	1999	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
Job losers[1]	2,822	2,622	2,646	2,695	2,678	2,670	2,670	2,629	2,573	2,518	2,493	2,401	2,477	2,616	2,541
On temporary layoff	866	848	833	843	837	876	847	893	869	802	851	795	739	838	781
Not on temporary layoff	1,957	1,774	1,813	1,852	1,841	1,794	1,823	1,736	1,704	1,716	1,642	1,606	1,739	1,778	1,759
Job leavers	734	783	774	810	781	831	768	793	758	778	821	825	776	759	824
Reentrants	2,132	2,005	2,007	2,039	2,034	2,038	2,003	1,942	1,967	1,958	1,935	2,036	2,043	1,975	1,979
New entrants	520	469	446	473	440	359	459	481	504	511	485	453	393	387	434
Percent of unemployed															
Job losers[1]	45.5	44.6	45.1	44.8	45.1	45.3	45.3	45.0	44.3	43.7	43.5	42.0	43.5	45.6	44.0
On temporary layoff	13.9	14.4	14.2	14.0	14.1	14.9	14.4	15.3	15.0	13.9	14.8	13.9	13.0	14.6	13.5
Not on temporary layoff	31.5	30.2	30.9	30.8	31.0	30.4	30.9	29.7	29.4	29.8	28.6	28.1	30.6	31.0	30.5
Job leavers	11.8	13.3	13.2	13.5	13.2	14.1	13.0	13.6	13.1	13.5	14.3	14.4	13.6	13.2	14.3
Reentrants	34.3	34.1	34.2	33.9	34.3	34.6	33.9	33.2	33.9	34.0	33.7	35.6	35.9	34.4	34.3
New entrants	8.4	8.0	7.6	7.9	7.4	6.1	7.8	8.2	8.7	8.9	8.5	7.9	6.9	6.7	7.5
Percent of civilian labor force															
Job losers[1]	2.1	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.7	1.8	1.9	1.8
Job leavers	.5	.6	.6	.6	.6	.6	.6	.6	.5	.6	.6	.6	.6	.5	.6
Reentrants	1.5	1.4	1.4	1.5	1.5	1.5	1.4	1.4	1.4	1.4	1.4	1.5	1.4	1.4	1.4
New entrants	.4	.3	.3	.3	.3	.3	.3	.3	.4	.4	.3	.3	.3	.3	.3

[1] Includes persons who completed temporary jobs.

9. Unemployment rates by sex and age, monthly data seasonally adjusted

[Civilian workers]

Sex and age	Annual average		1999										2000		
	1998	1999	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
Total, 16 years and over	4.5	4.2	4.2	4.3	4.2	4.3	4.3	4.2	4.2	4.1	4.1	4.1	4.0	4.1	4.1
16 to 24 years	10.4	9.9	10.0	10.0	9.6	9.8	9.7	9.6	10.0	10.0	10.0	9.8	9.3	10.0	9.7
16 to 19 years	14.6	13.9	14.2	14.1	13.1	13.6	13.2	13.5	14.6	13.9	14.0	13.8	12.6	14.1	13.3
16 to 17 years	17.2	16.3	16.6	16.6	16.1	16.3	15.4	15.9	16.1	15.9	16.5	16.5	14.0	15.9	15.3
18 to 19 years	12.8	12.4	12.7	12.4	11.2	11.8	11.7	12.1	13.8	12.4	12.3	12.1	11.4	12.8	12.1
20 to 24 years	7.9	7.5	7.4	7.5	7.5	7.6	7.6	7.3	7.2	7.7	7.7	7.4	7.4	7.5	7.6
25 years and over	3.4	3.1	3.1	3.3	3.2	3.2	3.2	3.2	3.1	3.0	3.0	3.0	3.0	3.0	3.0
25 to 54 years	3.5	3.2	3.2	3.3	3.2	3.3	3.3	3.2	3.2	3.1	3.1	3.0	3.1	3.0	3.0
55 years and over	2.7	2.8	2.8	2.9	2.7	3.0	2.9	2.7	2.6	2.7	2.6	2.7	2.8	3.0	2.7
Men, 16 years and over	4.4	4.1	4.0	4.1	4.2	4.1	4.1	4.1	4.0	4.1	4.0	4.0	3.9	4.1	3.8
16 to 24 years	11.1	10.3	10.1	10.5	10.2	10.5	10.2	9.9	9.9	10.4	10.2	10.6	9.7	10.3	9.2
16 to 19 years	16.2	14.7	15.0	14.8	13.9	14.3	13.8	13.9	14.6	14.2	14.9	15.2	14.0	15.5	12.4
16 to 17 years	19.1	17.0	17.3	18.3	17.6	16.8	16.1	16.2	16.6	15.5	16.9	17.7	14.3	17.3	15.1
18 to 19 years	14.1	13.1	13.5	12.6	11.5	12.7	12.2	12.6	13.2	13.2	13.6	13.5	13.7	13.9	10.5
20 to 24 years	8.1	7.7	7.2	7.9	8.0	8.3	8.1	7.6	7.2	8.2	7.5	7.8	7.2	7.3	7.4
25 years and over	3.2	3.0	2.8	3.0	3.1	3.0	3.0	3.1	3.0	2.9	2.8	2.8	2.8	2.9	2.8
25 to 54 years	3.3	3.0	2.9	3.0	3.1	3.0	3.0	3.1	3.0	3.0	2.9	2.9	2.9	2.9	2.8
55 years and over	2.8	2.8	2.6	2.7	2.8	2.7	3.0	2.9	2.9	2.8	2.6	2.5	2.5	2.8	2.8
Women, 16 years and over	4.6	4.3	4.5	4.6	4.2	4.4	4.4	4.3	4.3	4.2	4.2	4.1	4.2	4.1	4.3
16 to 24 years	9.8	9.5	9.9	9.5	8.9	9.1	9.1	9.3	10.0	9.6	9.8	8.9	8.9	9.6	10.2
16 to 19 years	12.9	13.2	13.4	13.4	12.2	13.0	12.6	13.2	14.7	13.4	13.0	12.2	11.1	12.6	14.4
16 to 17 years	15.1	15.5	15.9	14.8	14.5	15.7	14.7	15.6	15.6	16.3	16.1	15.1	13.7	14.3	15.4
18 to 19 years	11.5	11.6	11.7	12.1	10.9	10.9	11.2	11.6	14.5	11.4	10.8	10.5	8.9	11.6	13.7
20 to 24 years	7.8	7.2	7.7	7.1	6.9	6.8	7.1	7.0	7.2	7.2	7.9	7.0	7.6	7.8	7.7
25 years and over	3.6	3.3	3.4	3.6	3.3	3.5	3.5	3.3	3.2	3.1	3.1	3.2	3.2	3.0	3.2
25 to 54 years	3.8	3.4	3.5	3.7	3.4	3.5	3.6	3.4	3.4	3.2	3.3	3.2	3.3	3.0	3.3
55 years and over	2.6	2.8	3.1	3.1	2.6	3.3	2.9	2.4	2.1	2.5	2.6	2.9	3.1	3.3	2.7

10. Unemployment rates by State, seasonally adjusted

State	Feb. 1999	Jan. 2000	Feb. 2000[P]	State	Feb. 1999	Jan. 2000	Feb. 2000[P]
Alabama	4.6	4.9	4.6	Missouri	3.5	2.3	2.6
Alaska	6.7	5.9	5.8	Montana	5.5	4.9	4.8
Arizona	4.4	4.1	4.0	Nebraska	2.9	2.4	2.6
Arkansas	4.8	4.4	4.7	Nevada	4.3	4.1	3.7
California	5.5	4.8	4.6	New Hampshire	3.1	2.6	2.6
Colorado	3.0	2.6	2.8	New Jersey	4.5	3.9	4.1
Connecticut	3.3	2.2	2.4	New Mexico	5.7	5.3	5.4
Delaware	3.6	3.1	3.5	New York	5.3	4.9	4.7
District of Columbia	6.9	6.0	5.5	North Carolina	3.1	3.2	3.4
Florida	4.0	3.7	3.7	North Dakota	3.7	3.2	3.2
Georgia	4.2	3.6	3.4	Ohio	4.2	4.0	4.3
Hawaii	6.1	4.9	4.7	Oklahoma	3.8	2.8	2.9
Idaho	5.5	4.4	4.4	Oregon	6.0	4.7	4.9
Illinois	4.2	4.1	4.3	Pennsylvania	4.5	4.0	4.1
Indiana	3.1	3.0	3.2	Rhode Island	4.3	3.8	3.8
Iowa	2.7	2.4	2.2	South Carolina	4.4	4.3	4.1
Kansas	3.0	3.1	3.3	South Dakota	3.1	2.4	2.3
Kentucky	4.7	3.8	4.1	Tennessee	4.3	3.5	3.4
Louisiana	5.7	4.7	4.8	Texas	4.6	4.3	4.4
Maine	4.2	3.5	3.4	Utah	4.1	2.8	3.0
Maryland	3.8	3.1	3.0	Vermont	3.3	2.7	2.8
Massachusetts	3.1	3.0	3.1	Virginia	2.7	2.6	2.7
Michigan	4.0	3.2	2.7	Washington	5.0	4.5	4.7
Minnesota	2.9	2.5	2.6	West Virginia	6.4	5.6	5.6
Mississippi	4.9	5.1	5.6	Wisconsin	3.2	2.8	2.8
				Wyoming	5.1	4.1	4.1

[P] = preliminary

11. Employment of workers on nonfarm payrolls by State, seasonally adjusted

[In thousands]

State	Feb. 1999	Jan. 2000	Feb. 2000[P]	State	Feb. 1999	Jan. 2000	Feb. 2000[P]
Alabama	1,912.4	1,941.7	1,945.2	Missouri	2,709.9	2,752.9	2,738.5
Alaska	275.5	280.1	278.6	Montana	378.1	385.7	387.1
Arizona	2,125.0	2,214.7	2,222.5	Nebraska	886.7	894.8	892.9
Arkansas	1,135.5	1,158.2	1,162.6	Nevada	963.3	1,007.9	1,008.5
California	13,827.4	14,211.5	14,251.7	New Hampshire	600.1	612.8	612.0
Colorado	2,107.1	2,171.4	2,177.2	New Jersey	3,841.8	3,902.5	3,900.9
Connecticut	1,662.5	1,685.3	1,686.2	New Mexico	724.6	732.0	736.5
Delaware	408.0	415.8	419.2	New York	8,394.4	8,556.6	8,566.6
District of Columbia	614.9	620.7	620.5	North Carolina	3,850.7	3,906.2	3,901.9
Florida	6,779.4	7,032.2	7,057.1	North Dakota	321.6	327.8	325.9
Georgia	3,827.4	3,971.5	3,969.1	Ohio	5,526.3	5,585.6	5,592.8
Hawaii	528.8	535.9	536.8	Oklahoma	1,456.1	1,472.2	1,480.4
Idaho	531.3	546.2	550.7	Oregon	1,562.6	1,586.1	1,592.4
Illinois	5,937.3	5,948.2	5,980.2	Pennsylvania	5,558.7	5,625.2	5,607.8
Indiana	2,945.2	2,986.3	2,984.9	Rhode Island	461.0	466.1	468.4
Iowa	1,462.7	1,477.3	1,481.0	South Carolina	1,818.7	1,854.3	1,861.2
Kansas	1,323.8	1,340.0	1,340.1	South Dakota	369.2	378.3	378.3
Kentucky	1,781.0	1,822.5	1,824.1	Tennessee	2,663.2	2,693.5	2,698.1
Louisiana	1,899.9	1,899.2	1,904.4	Texas	9,098.2	9,279.1	9,306.4
Maine	581.0	593.1	597.8	Utah	1,038.5	1,060.4	1,065.6
Maryland	2,366.5	2,427.5	2,428.9	Vermont	288.8	294.5	294.6
Massachusetts	3,208.0	3,270.6	3,275.1	Virginia	3,383.8	3,451.6	3,448.9
Michigan	4,509.3	4,547.6	4,550.7	Washington	2,630.2	2,668.3	2,676.1
Minnesota	2,586.7	2,637.6	2,645.5	West Virginia	724.0	729.1	729.5
Mississippi	1,145.1	1,159.4	1,161.8	Wisconsin	2,759.0	2,796.5	2,805.4
				Wyoming	231.0	236.1	236.8

[P] = preliminary

NOTE: Some data in this table may differ from data published elsewhere because of the continual updating of the data base.

12. Employment of workers on nonfarm payrolls by industry, monthly data seasonally adjusted

[In thousands]

Industry	Annual average		1999										2000		
	1998	1999	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.[P]	Mar.[P]
TOTAL	125,826	128,615	127,813	128,134	128,162	128,443	128,816	128,945	129,048	129,332	129,589	129,898	130,292	130,299	130,715
PRIVATE SECTOR	106,007	108,455	107,726	108,035	108,085	108,338	108,663	108,735	108,830	109,095	109,320	109,583	109,927	109,912	110,186
GOODS-PRODUCING	25,347	25,240	25,285	25,288	25,199	25,180	25,247	25,148	25,186	25,198	25,257	25,283	25,410	25,383	25,471
Mining	590	535	550	538	531	526	528	524	527	528	527	529	530	532	536
Metal mining	50	49	50	49	49	48	48	47	48	48	49	48	49	48	48
Oil and gas extraction	339	293	305	294	287	285	285	285	287	289	288	291	292	296	301
Nonmetallic minerals, except fuels	109	109	108	109	109	109	110	109	109	109	108	108	108	108	108
Construction	5,985	6,273	6,232	6,277	6,239	6,258	6,270	6,246	6,293	6,314	6,369	6,393	6,504	6,487	6,576
General building contractors	1,372	1,434	1,429	1,428	1,427	1,430	1,432	1,426	1,440	1,445	1,450	1,454	1,474	1,478	1,488
Heavy construction, except building	838	862	864	874	854	857	857	852	857	861	870	878	900	883	900
Special trades contractors	3,744	3,978	3,939	3,975	3,958	3,971	3,981	3,968	3,996	4,008	4,049	4,061	4,130	4,126	4,188
Manufacturing	18,772	18,432	18,503	18,473	18,429	18,396	18,449	18,378	18,366	18,356	18,361	18,361	18,376	18,364	18,359
Production workers	12,930	12,662	12,714	12,696	12,662	12,623	12,691	12,622	12,617	12,608	12,613	12,613	12,627	12,614	12,606
Durable goods	11,170	10,985	11,014	10,993	10,971	10,960	11,015	10,975	10,959	10,952	10,954	10,960	10,973	10,973	10,978
Production workers	7,643	7,511	7,527	7,519	7,504	7,487	7,549	7,513	7,496	7,489	7,487	7,485	7,505	7,508	7,505
Lumber and wood products	813	826	827	824	824	824	826	826	827	829	829	828	827	831	829
Furniture and fixtures	530	540	535	536	537	538	546	543	544	546	544	543	543	545	546
Stone, clay, and glass products	563	569	569	570	569	568	571	568	569	568	571	574	577	574	576
Primary metal industries	712	690	693	691	689	687	692	688	685	685	686	687	686	687	688
Fabricated metal products	1,501	1,489	1,490	1,489	1,487	1,485	1,493	1,484	1,486	1,487	1,489	1,489	1,491	1,493	1,496
Industrial machinery and equipment	2,203	2,129	2,139	2,132	2,129	2,128	2,131	2,122	2,117	2,116	2,118	2,120	2,115	2,116	2,110
Computer and office equipment	379	360	360	361	362	364	360	359	358	358	358	359	357	356	354
Electronic and other electrical equipment	1,704	1,661	1,659	1,658	1,658	1,657	1,667	1,662	1,662	1,665	1,661	1,664	1,671	1,679	1,677
Electronic components and accessories	660	639	636	635	635	637	639	641	640	643	643	645	647	652	653
Transportation equipment	1,884	1,855	1,873	1,864	1,853	1,849	1,863	1,859	1,848	1,838	1,834	1,831	1,841	1,828	1,835
Motor vehicles and equipment	990	1,000	992	996	996	998	1,014	1,012	1,006	1,001	1,000	1,001	1,010	1,014	1,010
Aircraft and parts	524	490	511	503	498	491	488	483	476	471	467	464	463	447	460
Instruments and related products	868	839	844	842	839	837	840	836	833	830	833	833	830	830	832
Miscellaneous manufacturing industries	393	387	385	387	386	387	386	387	388	388	389	391	392	390	389
Nondurable goods	7,602	7,446	7,489	7,480	7,458	7,436	7,434	7,403	7,407	7,404	7,407	7,401	7,403	7,391	7,381
Production workers	5,287	5,151	5,187	5,177	5,158	5,136	5,142	5,109	5,121	5,119	5,126	5,128	5,122	5,106	5,101
Food and kindred products	1,686	1,685	1,693	1,689	1,688	1,680	1,681	1,666	1,679	1,680	1,686	1,686	1,689	1,678	1,677
Tobacco products	41	39	39	38	38	39	39	36	38	38	39	38	38	38	35
Textile mill products	598	562	571	567	563	560	559	557	553	551	553	551	549	550	550
Apparel and other textile products	763	684	702	698	691	686	679	672	669	666	663	662	657	656	655
Paper and allied products	675	659	662	662	661	659	659	658	657	655	655	655	654	653	651
Printing and publishing	1,565	1,553	1,557	1,555	1,551	1,552	1,554	1,553	1,552	1,552	1,549	1,547	1,550	1,551	1,552
Chemicals and allied products	1,043	1,035	1,037	1,038	1,036	1,033	1,032	1,030	1,033	1,033	1,033	1,030	1,034	1,035	1,033
Petroleum and coal products	140	137	139	139	138	137	138	136	137	136	136	135	136	136	136
Rubber and miscellaneous plastics products	1,009	1,019	1,014	1,019	1,018	1,016	1,021	1,022	1,017	1,021	1,022	1,026	1,025	1,024	1,022
Leather and leather products	83	74	75	75	74	74	72	73	72	72	71	71	71	70	70
SERVICE-PRODUCING	100,480	103,375	102,528	102,846	102,963	103,263	103,569	103,797	103,862	104,134	104,332	104,615	104,882	104,916	105,244
Transportation and public utilities	6,600	6,792	6,732	6,750	6,758	6,781	6,799	6,813	6,831	6,841	6,862	6,897	6,902	6,892	6,919
Transportation	4,276	4,425	4,378	4,397	4,402	4,423	4,438	4,445	4,455	4,458	4,474	4,501	4,507	4,493	4,517
Railroad transportation	231	230	235	234	233	233	230	226	227	227	226	227	226	225	225
Local and interurban passenger transit	468	482	476	483	480	483	483	488	486	486	487	487	491	490	492
Trucking and warehousing	1,745	1,813	1,796	1,800	1,802	1,810	1,817	1,817	1,825	1,828	1,839	1,845	1,849	1,840	1,851
Water transportation	180	181	177	180	180	181	182	182	182	182	180	182	181	183	182
Transportation by air	1,183	1,237	1,218	1,220	1,226	1,234	1,240	1,246	1,250	1,251	1,257	1,273	1,277	1,271	1,281
Pipelines, except natural gas	14	13	14	14	13	13	13	13	13	13	13	13	13	13	13
Transportation services	455	469	462	466	468	469	473	473	472	471	472	474	470	471	473
Communications and public utilities	2,324	2,366	2,354	2,353	2,356	2,358	2,361	2,368	2,376	2,383	2,388	2,396	2,395	2,399	2,402
Communications	1,469	1,522	1,506	1,508	1,513	1,513	1,519	1,525	1,533	1,541	1,546	1,553	1,552	1,560	1,565
Electric, gas, and sanitary services	855	845	848	845	843	845	842	843	843	842	842	843	843	839	837
Wholesale trade	6,831	7,004	6,947	6,965	6,977	6,993	7,012	7,031	7,041	7,064	7,070	7,088	7,108	7,119	7,136
Retail trade	22,296	22,787	22,611	22,724	22,748	22,796	22,903	22,888	22,862	22,891	22,902	22,973	23,018	22,996	22,999
Building materials and garden supplies	948	987	982	982	979	982	986	988	992	1,001	1,004	1,007	1,012	1,018	1,031
General merchandise stores	2,730	2,775	2,794	2,799	2,784	2,782	2,778	2,774	2,762	2,756	2,753	2,793	2,798	2,773	2,757
Department stores	2,426	2,472	2,489	2,499	2,486	2,482	2,476	2,468	2,460	2,455	2,450	2,479	2,477	2,467	2,449

See footnotes at end of table.

12. Continued—Employment of workers on nonfarm payrolls by industry, monthly data seasonally adjusted

[In thousands]

Industry	Annual average		1999										2000		
	1998	1999	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.[P]	Mar.[P]
Food stores	3,482	3,483	3,490	3,492	3,487	3,479	3,478	3,484	3,478	3,481	3,480	3,482	3,481	3,480	3,479
Automotive dealers and service stations	2,341	2,406	2,392	2,399	2,400	2,403	2,407	2,409	2,415	2,420	2,424	2,432	2,445	2,439	2,452
New and used car dealers	1,048	1,081	1,069	1,074	1,077	1,080	1,085	1,089	1,091	1,092	1,096	1,097	1,100	1,103	1,108
Apparel and accessory stores	1,143	1,180	1,167	1,163	1,172	1,178	1,192	1,191	1,189	1,200	1,198	1,177	1,178	1,191	1,187
Furniture and home furnishings stores	1,026	1,085	1,070	1,081	1,084	1,091	1,090	1,094	1,097	1,099	1,095	1,102	1,102	1,106	1,112
Eating and drinking places	7,760	7,904	7,785	7,863	7,880	7,911	7,989	7,960	7,932	7,925	7,943	7,986	7,987	7,973	7,958
Miscellaneous retail establishments	2,867	2,968	2,931	2,945	2,962	2,970	2,983	2,988	2,997	3,009	3,005	2,994	3,015	3,016	3,023
Finance, insurance, and real estate	7,407	7,632	7,595	7,611	7,621	7,636	7,647	7,650	7,653	7,668	7,675	7,685	7,685	7,696	7,685
Finance	3,593	3,706	3,690	3,697	3,706	3,709	3,715	3,716	3,715	3,719	3,723	3,727	3,726	3,728	3,721
Depository institutions	2,042	2,047	2,051	2,050	2,047	2,045	2,044	2,046	2,047	2,047	2,044	2,040	2,040	2,039	2,037
Commercial banks	1,468	1,465	1,469	1,467	1,465	1,463	1,462	1,464	1,466	1,464	1,460	1,458	1,458	1,457	1,458
Savings institutions	258	256	258	257	256	256	256	255	255	254	254	252	251	250	247
Nondepository institutions	658	714	712	716	720	721	721	719	713	711	711	713	708	706	695
Security and commodity brokers	645	679	664	668	672	676	682	685	686	691	697	702	705	711	718
Holding and other investment offices	248	266	263	263	267	267	268	266	269	270	271	272	273	272	271
Insurance	2,344	2,402	2,392	2,395	2,399	2,402	2,404	2,407	2,410	2,414	2,411	2,416	2,406	2,412	2,408
Insurance carriers	1,598	1,635	1,632	1,631	1,635	1,638	1,635	1,636	1,637	1,641	1,636	1,639	1,632	1,636	1,632
Insurance agents, brokers, and service	746	767	760	764	764	764	769	771	773	773	775	777	774	776	776
Real estate	1,471	1,525	1,513	1,519	1,516	1,525	1,528	1,527	1,528	1,535	1,541	1,542	1,553	1,556	1,556
Services[1]	37,526	39,000	38,556	38,697	38,782	38,952	39,055	39,205	39,257	39,433	39,554	39,657	39,804	39,826	39,976
Agricultural services	706	759	747	755	751	757	760	757	763	766	774	765	788	783	801
Hotels and other lodging places	1,776	1,799	1,789	1,791	1,786	1,797	1,807	1,813	1,811	1,806	1,812	1,807	1,800	1,805	1,820
Personal services	1,195	1,206	1,200	1,204	1,189	1,200	1,207	1,207	1,210	1,210	1,214	1,225	1,231	1,228	1,234
Business services	8,584	9,123	8,963	9,010	9,047	9,088	9,148	9,186	9,204	9,303	9,336	9,392	9,416	9,423	9,471
Services to buildings	950	988	973	978	979	984	992	998	1,000	1,003	1,003	1,000	999	1,005	1,013
Personnel supply services	3,230	3,405	3,343	3,350	3,366	3,387	3,422	3,418	3,440	3,490	3,501	3,513	3,505	3,516	3,535
Help supply services	2,872	3,017	2,967	2,975	2,986	3,000	3,025	3,024	3,032	3,099	3,097	3,108	3,100	3,109	3,122
Computer and data processing services	1,599	1,781	1,734	1,749	1,765	1,781	1,794	1,806	1,814	1,823	1,829	1,842	1,852	1,859	1,867
Auto repair services and parking	1,144	1,185	1,176	1,178	1,182	1,184	1,185	1,185	1,190	1,196	1,197	1,198	1,202	1,205	1,199
Miscellaneous repair services	382	397	393	396	398	395	395	396	398	400	400	405	403	406	408
Motion pictures	573	600	580	587	604	611	609	608	608	612	613	609	616	610	612
Amusement and recreation services	1,601	1,696	1,660	1,668	1,675	1,695	1,694	1,712	1,713	1,730	1,734	1,725	1,759	1,759	1,760
Health services	9,846	9,973	9,932	9,951	9,954	9,964	9,975	9,993	9,999	10,009	10,026	10,038	10,057	10,060	10,072
Offices and clinics of medical doctors	1,803	1,865	1,850	1,856	1,860	1,864	1,868	1,874	1,876	1,880	1,885	1,886	1,895	1,899	1,908
Nursing and personal care facilities	1,762	1,755	1,754	1,753	1,755	1,755	1,754	1,755	1,756	1,756	1,756	1,759	1,760	1,761	1,763
Hospitals	3,926	3,970	3,963	3,966	3,966	3,969	3,968	3,973	3,977	3,978	3,978	3,985	3,992	3,989	3,991
Home health care services	672	655	653	656	653	653	655	658	657	658	658	659	658	656	652
Legal services	973	1,002	995	998	999	1,002	1,000	1,004	1,007	1,009	1,012	1,015	1,017	1,014	1,015
Educational services	2,177	2,270	2,243	2,254	2,265	2,272	2,278	2,288	2,289	2,288	2,298	2,304	2,297	2,300	2,321
Social services	2,644	2,782	2,744	2,755	2,760	2,778	2,763	2,799	2,803	2,817	2,840	2,850	2,872	2,875	2,890
Child day care services	605	632	627	628	629	633	632	631	631	634	646	650	657	655	661
Residential care	747	781	769	772	775	777	781	785	788	792	796	801	803	807	809
Museums and botanical and zoological gardens	93	94	95	94	93	94	94	95	94	95	96	95	96	95	97
Membership organizations	2,361	2,402	2,392	2,392	2,394	2,409	2,403	2,409	2,408	2,409	2,411	2,418	2,420	2,419	2,419
Engineering and management services	3,185	3,420	3,354	3,370	3,391	3,411	3,441	3,458	3,464	3,487	3,496	3,515	3,532	3,546	3,560
Engineering and architectural services	905	944	933	939	940	942	948	948	948	954	959	964	973	977	978
Management and public relations	1,034	1,158	1,123	1,133	1,143	1,153	1,165	1,178	1,180	1,193	1,196	1,213	1,220	1,219	1,226
Government	19,819	20,160	20,087	20,099	20,077	20,105	20,153	20,210	20,218	20,237	20,269	20,315	20,365	20,387	20,529
Federal	2,686	2,669	2,710	2,688	2,666	2,664	2,656	2,651	2,654	2,643	2,648	2,645	2,665	2,703	2,809
Federal, except Postal Service	1,819	1,796	1,831	1,809	1,788	1,789	1,779	1,779	1,785	1,780	1,780	1,780	1,799	1,837	1,944
State	4,612	4,695	4,680	4,688	4,677	4,675	4,682	4,706	4,717	4,722	4,729	4,730	4,727	4,726	4,728
Education	1,916	1,953	1,948	1,955	1,941	1,934	1,947	1,965	1,965	1,960	1,967	1,969	1,967	1,963	1,966
Other State government	2,695	2,743	2,732	2,733	2,736	2,741	2,735	2,741	2,752	2,762	2,762	2,761	2,760	2,763	2,762
Local	12,521	12,796	12,697	12,723	12,734	12,766	12,815	12,853	12,847	12,872	12,892	12,940	12,973	12,958	12,992
Education	7,082	7,265	7,200	7,206	7,225	7,239	7,268	7,308	7,295	7,305	7,318	7,351	7,365	7,349	7,362
Other local government	5,440	5,531	5,497	5,517	5,509	5,527	5,547	5,545	5,552	5,567	5,574	5,589	5,608	5,609	5,630

[1] Includes other industries not shown separately.

[P] = preliminary.

NOTE: See "Notes on the data" for a description of the most recent benchmark revision.

13. Average weekly hours of production or nonsupervisory workers on private nonfarm payrolls, by industry, monthly data seasonally adjusted

Industry	Annual average		1999										2000		
	1998	1999	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.[P]	Mar.[P]
PRIVATE SECTOR	34.6	34.5	34.5	34.4	34.4	34.5	34.5	34.5	34.4	34.5	34.5	34.5	34.6	34.5	34.5
GOODS-PRODUCING	41.0	41.0	40.8	40.9	41.0	41.2	41.2	41.1	41.1	41.1	41.3	40.9	41.1	41.4	41.1
MINING	43.9	43.8	42.9	43.8	44.1	44.0	45.1	44.2	44.3	44.1	44.2	44.2	44.9	44.6	44.5
MANUFACTURING	41.7	41.7	41.5	41.6	41.7	41.7	41.9	41.8	41.8	41.8	41.7	41.6	41.7	41.8	41.6
Overtime hours	4.6	4.6	4.5	4.3	4.6	4.7	4.7	4.7	4.7	4.7	4.6	4.6	4.7	4.8	4.6
Durable goods	42.3	42.2	42.0	42.1	42.2	42.3	42.5	42.4	42.4	42.3	42.2	42.1	42.3	42.4	42.3
Overtime hours	4.8	4.8	4.6	4.3	4.7	4.8	4.9	4.9	4.9	4.8	4.7	4.8	4.8	4.9	4.8
Lumber and wood products	41.1	41.2	41.2	41.2	41.2	41.1	41.1	41.3	41.1	41.1	41.1	40.9	41.1	41.0	40.8
Furniture and fixtures	40.6	40.3	40.3	40.4	40.4	40.4	40.6	40.3	40.4	40.2	39.9	40.0	40.2	40.4	40.4
Stone, clay, and glass products	43.5	43.4	42.9	43.1	43.4	43.4	43.6	43.6	43.6	43.4	43.9	43.3	43.6	43.5	43.2
Primary metal industries	44.2	44.2	43.9	44.0	44.3	44.3	44.5	44.4	44.4	44.3	44.3	44.4	44.5	44.5	44.2
Blast furnaces and basic steel products	44.6	44.8	43.9	44.5	44.8	45.2	45.2	45.1	45.0	45.0	45.3	45.5	45.1	45.5	44.6
Fabricated metal products	42.3	42.2	42.1	41.8	42.1	42.1	42.3	42.4	42.3	42.1	42.1	41.9	42.3	42.5	42.4
Industrial machinery and equipment	42.8	42.2	41.9	41.9	42.1	42.0	42.4	42.4	42.4	42.4	42.2	42.2	42.5	42.4	42.4
Electronic and other electrical equipment	41.4	41.4	41.0	41.1	41.5	41.5	41.7	41.7	41.6	41.6	41.4	41.2	41.4	41.6	41.8
Transportation equipment	43.4	43.8	43.7	44.0	43.5	44.2	44.4	44.0	44.0	43.9	43.5	43.3	43.7	44.0	43.7
Motor vehicles and equipment	43.5	45.0	44.7	45.1	44.4	45.4	46.0	45.2	45.2	45.3	44.7	44.4	45.1	45.1	44.7
Instruments and related products	41.3	41.5	41.2	41.6	41.6	41.5	41.7	41.6	41.6	41.5	41.5	41.6	41.2	41.2	40.9
Miscellaneous manufacturing	39.9	39.9	39.8	39.6	40.2	40.0	40.1	40.1	40.0	39.8	39.6	39.9	39.4	39.6	39.5
Nondurable goods	40.9	40.9	40.8	40.9	41.0	41.0	41.1	40.9	40.9	41.0	41.0	40.9	40.9	41.0	40.7
Overtime hours	4.3	4.4	4.4	4.2	4.4	4.5	4.5	4.4	4.4	4.5	4.4	4.5	4.4	4.5	4.3
Food and kindred products	41.7	41.8	41.7	41.9	41.8	41.8	42.0	41.6	41.7	42.0	41.9	41.6	41.6	41.5	41.3
Textile mill products	41.0	40.9	40.4	41.0	41.0	40.6	41.3	40.9	40.8	41.3	41.2	41.2	40.9	41.8	41.5
Apparel and other textile products	37.3	37.4	37.4	37.5	37.8	37.7	37.5	37.3	37.5	37.5	37.3	37.4	37.6	37.8	37.7
Paper and allied products	43.4	43.5	43.7	43.6	43.5	43.5	43.5	43.7	43.5	43.5	43.5	43.2	43.3	43.5	43.2
Printing and publishing	38.3	38.2	37.9	38.1	38.3	38.3	38.4	38.3	38.3	38.4	38.3	38.2	38.3	38.2	38.1
Chemicals and allied products	43.2	43.0	42.8	43.0	43.0	43.0	43.1	43.3	43.2	43.1	43.1	43.1	43.0	42.7	42.4
Rubber and miscellaneous plastics products	41.7	41.7	41.8	41.5	41.9	41.8	41.7	41.6	41.7	41.5	41.5	41.3	41.7	41.6	41.3
Leather and leather products	37.6	37.7	37.7	38.1	38.4	37.9	37.9	38.2	37.2	37.5	37.6	36.8	37.5	38.1	37.8
SERVICE-PRODUCING	32.9	32.8	32.8	32.8	32.8	32.8	32.9	32.9	32.8	32.8	32.8	32.9	32.9	32.8	32.9
TRANSPORTATION AND PUBLIC UTILITIES	39.5	38.7	39.1	39.0	38.8	38.9	38.7	38.9	38.6	38.5	38.2	38.5	38.4	38.4	38.3
WHOLESALE TRADE	38.4	38.4	38.4	38.4	38.3	38.4	38.4	38.4	38.5	38.6	38.4	38.5	38.6	38.4	38.5
RETAIL TRADE	29.0	29.0	29.0	29.0	29.1	29.1	29.1	29.0	28.8	28.9	28.9	29.1	29.2	29.0	29.1

[P] = preliminary.

NOTE: See "Notes on the data" for a description of the most recent benchmark revision.

14. Average hourly earnings of production or nonsupervisory workers on private nonfarm payrolls, by industry, seasonally adjusted

Industry	Annual average		1999										2000		
	1998	1999	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.[P]	Mar.[P]
PRIVATE SECTOR (in current dollars)	$ 12.78	$ 13.24	$13.11	$13.14	$13.18	$13.24	$13.28	$13.29	$13.35	$13.39	$13.40	$13.44	$13.49	$13.55	$13.60
Goods-producing	14.34	14.82	14.61	14.67	14.75	14.85	14.90	14.90	14.93	14.97	14.99	15.03	15.10	15.18	15.23
Mining	16.90	17.04	17.00	16.87	17.05	16.96	17.23	17.12	17.09	17.09	16.93	17.01	17.01	17.06	17.19
Construction	16.59	17.13	16.92	16.97	17.08	17.16	17.18	17.15	17.21	17.27	17.31	17.42	17.44	17.55	17.61
Manufacturing	13.49	13.91	13.71	13.79	13.85	13.95	14.02	14.03	14.04	14.07	14.06	14.09	14.15	14.21	14.24
Excluding overtime	12.79	13.18	13.00	13.09	13.13	13.20	13.26	13.28	13.29	13.33	13.32	13.35	13.42	13.44	13.50
Service-producing	12.27	12.74	12.63	12.65	12.68	12.73	12.77	12.79	12.85	12.89	12.90	12.95	12.98	13.04	13.09
Transportation and public utilities	15.31	15.67	15.53	15.60	15.65	15.65	15.70	15.70	15.76	15.76	15.81	15.94	15.87	16.02	16.07
Wholesale trade	14.06	14.59	14.42	14.44	14.48	14.56	14.61	14.63	14.74	14.80	14.81	14.88	14.99	14.95	15.01
Retail trade	8.73	9.08	8.98	9.03	9.04	9.06	9.10	9.13	9.15	9.18	9.20	9.26	9.26	9.31	9.34
Finance, insurance, and real estate	14.06	14.61	14.51	14.58	14.60	14.62	14.68	14.63	14.70	14.72	14.73	14.75	14.88	14.84	14.92
Services	12.85	13.38	13.27	13.28	13.33	13.38	13.42	13.44	13.49	13.55	13.55	13.60	13.64	13.70	13.75
PRIVATE SECTOR (in constant (1982) dollars)	7.75	7.86	7.86	7.83	7.85	7.89	7.88	7.87	7.86	7.87	7.86	7.87	7.88	7.88	–

– Data not available.

[P] = preliminary.

NOTE: See "Notes on the data" for a description of the most recent benchmark revision.

15. Average hourly earnings of production or nonsupervisory workers on private nonfarm payrolls, by industry

Industry	Annual average		1999										2000		
	1998	1999	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.[P]	Mar.[P]
PRIVATE SECTOR	$12.78	$13.24	$13.12	$13.16	$13.19	$13.14	$13.15	$13.20	$13.38	$13.41	$13.43	$13.47	$13.58	$13.59	$13.62
MINING	16.90	17.04	17.01	16.93	17.00	16.93	17.12	17.01	17.10	17.00	16.95	17.13	17.24	17.15	17.22
CONSTRUCTION	16.59	17.13	16.79	16.85	17.02	17.08	17.22	17.26	17.41	17.49	17.37	17.42	17.34	17.37	17.47
MANUFACTURING	13.49	13.91	13.73	13.80	13.85	13.91	13.92	13.95	14.11	14.04	14.08	14.21	14.19	14.19	14.24
Durable goods	13.98	14.40	14.20	14.27	14.34	14.40	14.38	14.47	14.63	14.55	14.58	14.73	14.72	14.73	14.78
Lumber and wood products	11.10	11.46	11.31	11.37	11.42	11.45	11.52	11.53	11.55	11.59	11.59	11.63	11.66	11.61	11.64
Furniture and fixtures	10.90	11.23	11.10	11.14	11.14	11.16	11.24	11.28	11.33	11.33	11.35	11.46	11.46	11.50	11.57
Stone, clay, and glass products	13.60	13.90	13.70	13.75	13.87	13.94	14.00	13.97	14.12	14.02	14.07	14.00	13.98	13.99	14.05
Primary metal industries	15.49	15.85	15.53	15.62	15.75	15.91	16.03	15.99	16.20	16.02	16.14	16.19	16.22	16.29	16.42
Blast furnaces and basic steel products	18.43	18.87	18.56	18.59	18.79	19.05	19.12	18.99	19.05	18.96	19.18	19.16	19.23	19.39	19.80
Fabricated metal products	13.06	13.46	13.33	13.36	13.45	13.46	13.45	13.50	13.61	13.50	13.57	13.70	13.69	13.65	13.69
Industrial machinery and equipment	14.47	15.01	14.81	14.85	14.95	14.99	15.07	15.13	15.23	15.18	15.21	15.36	15.39	15.39	15.38
Electronic and other electrical equipment	13.09	13.45	13.27	13.31	13.38	13.40	13.49	13.51	13.62	13.58	13.59	13.70	13.74	13.71	13.77
Transportation equipment	17.53	18.10	17.66	17.88	17.98	18.20	17.94	18.23	18.56	18.47	18.46	18.78	18.64	18.65	18.76
Motor vehicles and equipment	17.86	18.48	17.98	18.31	18.40	18.68	18.23	18.61	19.04	18.93	18.87	19.29	19.07	19.11	19.21
Instruments and related products	13.81	14.17	13.97	14.07	14.10	14.13	14.25	14.28	14.30	14.36	14.34	14.40	14.38	14.41	14.49
Miscellaneous manufacturing	10.89	11.33	11.19	11.25	11.25	11.30	11.32	11.34	11.46	11.47	11.43	11.57	11.54	11.56	11.55
Nondurable goods	12.76	13.17	13.03	13.09	13.11	13.15	13.22	13.18	13.35	13.27	13.33	13.41	13.39	13.38	13.42
Food and kindred products	11.80	12.10	11.93	12.07	12.11	12.16	12.15	12.08	12.19	12.10	12.20	12.29	12.24	12.25	12.33
Tobacco products	18.55	19.07	19.33	19.99	20.63	20.79	21.15	20.99	18.88	17.77	17.96	17.97	17.16	17.32	18.54
Textile mill products	10.39	10.71	10.62	10.68	10.69	10.76	10.71	10.72	10.78	10.72	10.80	10.84	10.84	10.84	10.86
Apparel and other textile products	8.52	8.86	8.78	8.83	8.81	8.89	8.83	8.88	9.01	8.99	8.98	9.03	9.02	9.01	9.05
Paper and allied products	15.51	15.97	15.78	15.83	15.91	15.98	16.05	15.98	16.27	16.12	16.12	16.15	16.05	16.03	16.08
Printing and publishing	13.45	13.83	13.73	13.73	13.74	13.73	13.80	13.82	13.97	13.97	14.01	14.11	14.10	14.13	14.19
Chemicals and allied products	17.12	17.47	17.18	17.27	17.39	17.35	17.49	17.51	17.78	17.72	17.75	17.79	17.81	17.80	17.78
Petroleum and coal products	20.92	21.46	21.59	21.49	21.05	21.14	21.35	21.29	21.62	21.68	21.83	21.83	21.68	22.03	22.30
Rubber and miscellaneous plastics products	11.87	12.31	12.20	12.23	12.21	12.25	12.35	12.32	12.46	12.37	12.41	12.51	12.55	12.53	12.52
Leather and leather products	9.32	9.69	9.55	9.59	9.59	9.57	9.61	9.77	9.86	9.83	9.84	9.92	9.99	9.87	9.96
TRANSPORTATION AND PUBLIC UTILITIES	15.31	15.67	15.51	15.57	15.55	15.56	15.66	15.67	15.78	15.76	15.87	15.94	15.95	16.06	16.04
WHOLESALE TRADE	14.06	14.59	14.34	14.48	14.53	14.44	14.55	14.65	14.73	14.78	14.82	14.91	15.06	14.96	14.94
RETAIL TRADE	8.73	9.08	9.00	9.03	9.03	9.02	9.02	9.04	9.18	9.20	9.21	9.25	9.33	9.34	9.36
FINANCE, INSURANCE, AND REAL ESTATE	14.06	14.61	14.53	14.61	14.72	14.50	14.53	14.61	14.63	14.68	14.73	14.75	14.97	14.91	14.94
SERVICES	12.85	13.38	13.33	13.32	13.34	13.23	13.20	13.25	13.48	13.54	13.60	13.69	13.81	13.81	13.83

[P] = preliminary.

NOTE: See "Notes on the data" for a description of the most recent benchmark revision.

16. Average weekly earnings of production or nonsupervisory workers on private nonfarm payrolls, by industry

Industry	Annual average		1999										2000		
	1998	1999	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.[P]	Mar.[P]
PRIVATE SECTOR															
Current dollars	$442.19	$456.78	$448.70	$451.39	$456.37	$454.64	$456.31	$463.32	$458.93	$463.99	$463.34	$466.06	$467.15	$464.78	$465.80
Seasonally adjusted	–	–	452.30	452.02	453.39	456.78	458.16	458.51	459.24	461.96	462.30	463.68	466.75	467.48	469.20
Constant (1982) dollars	268.32	271.25	269.33	268.84	271.65	270.62	270.81	274.15	269.96	272.45	271.91	273.51	273.51	270.69	268.94
MINING	741.91	746.35	717.82	733.07	751.40	748.31	765.26	756.95	759.24	758.20	757.67	760.57	763.73	756.32	752.51
CONSTRUCTION	643.69	668.07	632.98	650.41	668.89	679.78	687.08	690.40	672.03	699.60	686.12	674.15	664.12	672.22	676.09
MANUFACTURING															
Current dollars	562.53	580.05	568.42	574.08	577.55	581.44	573.50	583.11	588.39	589.68	594.18	603.93	590.30	588.89	590.96
Constant (1982) dollars	341.34	344.45	341.19	341.92	343.78	346.10	340.36	345.04	346.11	346.26	348.70	354.42	345.61	342.98	341.20
Durable goods	591.35	607.68	596.40	602.19	606.58	610.56	598.21	612.08	615.92	618.38	622.57	634.86	621.18	620.13	622.24
Lumber and wood products	456.21	472.15	461.45	468.44	472.79	476.32	473.47	480.80	472.40	479.83	479.83	480.32	474.56	469.04	470.26
Furniture and fixtures	442.54	452.57	444.00	447.83	443.37	449.75	451.85	459.10	457.73	458.87	458.54	471.01	459.55	457.70	463.96
Stone, clay, and glass products	591.60	603.26	578.14	594.00	607.51	611.97	613.20	616.08	621.28	616.88	620.49	606.20	592.75	593.18	595.72
Primary metal industries	684.66	700.57	681.77	688.84	699.30	706.40	698.91	705.16	717.66	709.69	721.46	733.41	723.41	723.28	724.12
Blast furnaces and basic steel products	821.98	845.38	814.78	829.11	843.67	861.06	854.66	852.65	855.35	851.30	868.85	881.36	871.12	878.37	881.10
Fabricated metal products	552.44	568.01	557.19	562.46	566.25	569.36	558.18	571.05	568.90	572.40	579.44	591.84	579.09	576.03	576.35
Industrial machinery and equipment	619.32	633.42	623.50	626.67	630.89	631.08	628.42	635.46	635.09	642.11	646.43	663.55	654.08	652.54	653.65
Electronic and other electrical equipment	541.93	556.83	541.42	547.04	551.26	556.10	551.74	562.02	562.51	567.64	572.14	580.88	571.58	567.59	572.83
Transportation equipment	760.80	792.78	775.27	790.30	789.32	802.62	757.07	796.65	816.64	814.53	814.09	843.22	814.57	818.74	821.69
Motor vehicles and equipment	776.91	831.60	810.90	834.94	831.68	848.07	780.24	831.87	866.32	857.53	852.92	891.20	856.24	859.95	864.45
Instruments and related products	570.35	588.06	578.36	583.91	583.74	586.40	584.25	591.19	587.73	594.50	600.85	612.00	595.33	595.13	594.09
Miscellaneous manufacturing	434.51	452.07	447.60	448.88	451.13	450.87	444.88	453.60	454.96	461.09	459.49	467.43	451.21	455.46	457.38
Nondurable goods	521.88	538.65	529.02	532.76	536.20	539.15	538.05	540.38	547.35	548.05	551.86	557.86	544.97	543.23	543.51
Food and kindred products	492.06	505.78	490.32	497.28	503.78	505.86	507.87	506.15	513.20	513.04	518.50	521.10	505.51	501.03	501.83
Tobacco products	710.47	764.71	736.47	767.62	821.07	833.68	854.46	841.70	753.31	753.45	775.87	794.27	670.96	680.68	717.50
Textile mill products	425.99	438.04	427.99	436.81	437.22	441.16	434.83	440.59	438.75	444.88	449.28	453.11	443.36	447.69	449.60
Apparel and other textile products	317.80	331.36	328.37	332.01	333.02	338.71	326.71	333.00	331.57	338.92	337.65	343.14	335.54	338.78	341.19
Paper and allied products	673.13	694.70	684.85	690.19	688.90	695.13	690.15	693.53	712.63	706.06	707.67	713.83	696.57	689.29	689.83
Printing and publishing	515.14	528.31	520.37	523.11	522.12	520.37	525.78	530.69	539.24	539.24	543.59	548.88	534.39	535.53	540.64
Chemicals and allied products	739.58	751.21	735.30	737.43	744.29	746.05	746.82	754.68	769.87	763.73	770.35	779.20	764.05	756.50	753.87
Petroleum and coal products	912.11	924.93	943.48	917.62	896.73	909.02	924.46	906.95	931.82	936.58	938.69	940.87	938.74	962.71	976.74
Rubber and miscellaneous plastics products	494.98	513.33	509.96	511.21	511.60	513.28	506.35	510.05	517.09	514.59	519.98	529.17	519.57	518.74	517.08
Leather and leather products	350.43	365.31	359.08	363.46	367.30	367.49	359.41	377.12	367.78	370.59	373.92	371.01	368.63	370.13	374.50
TRANSPORTATION AND PUBLIC UTILITIES	604.75	606.43	601.79	601.00	603.34	606.84	609.17	617.40	607.53	605.18	607.82	612.10	609.29	613.49	609.52
WHOLESALE TRADE	539.90	560.26	547.79	554.58	560.86	554.50	558.72	566.96	564.16	570.51	569.09	574.04	579.81	571.47	570.71
RETAIL TRADE	253.17	263.32	257.40	259.16	262.77	265.19	268.80	270.30	264.38	264.96	264.33	271.03	265.91	266.19	267.70
FINANCE, INSURANCE, AND REAL ESTATE	511.78	528.88	523.08	524.50	535.81	520.55	525.99	539.11	526.68	529.95	530.28	533.95	549.40	536.76	537.84
SERVICES	418.91	436.19	431.89	431.57	436.22	431.30	432.96	439.90	435.40	442.76	444.72	446.29	451.59	450.21	449.48

[P] = preliminary.

NOTE: See "Notes on the data" for a description of the most recent benchmark revision. Dash indicates data not available.

17. Diffusion indexes of employment change, seasonally adjusted

[In percent]

Timespan and year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov	Dec.
	Private nonfarm payrolls, 356 industries											
Over 1-month span:												
1997	56.2	61.0	61.9	62.8	58.8	56.3	60.7	61.0	59.4	65.4	63.6	62.1
1998	63.8	57.9	58.8	60.5	55.9	57.9	58.0	55.8	54.6	52.9	59.1	58.6
1999	54.4	58.3	52.1	58.8	51.5	57.0	57.6	50.0	55.1	57.2	57.9	57.7
2000	57.7	52.5	57.9	–	–	–	–	–	–	–	–	–
Over 3-month span:												
1997	63.8	63.6	67.7	67.3	62.6	61.7	61.4	66.2	67.3	69.9	70.8	71.2
1998	66.7	66.2	64.5	63.9	61.4	58.7	60.0	58.4	57.6	57.6	59.0	60.4
1999	60.7	55.9	59.6	54.6	56.3	56.2	56.2	59.0	57.4	59.6	60.8	60.5
2000	59.7	60.7	–	–	–	–	–	–	–	–	–	–
Over 6-month span:												
1997	67.4	68.3	65.6	67.0	65.6	64.9	66.3	68.4	69.7	71.3	71.3	71.9
1998	70.6	66.9	65.9	62.4	62.6	61.1	58.0	59.8	60.0	60.8	60.8	58.0
1999	61.1	58.8	57.3	59.0	55.2	57.4	56.9	61.5	61.0	59.7	61.4	62.2
Over 12-month span:												
1997	69.0	67.3	68.3	69.7	69.5	70.1	70.1	70.4	70.5	69.7	69.8	71.3
1998	70.4	68.3	67.1	64.0	62.1	61.7	61.8	63.8	59.8	59.0	59.3	58.6
1999	60.1	57.3	57.0	57.6	58.7	59.0	58.8	57.9	61.0	–	–	–
	Manufacturing payrolls, 139 industries											
Over 1-month span:												
1997	50.0	52.9	53.6	56.1	52.2	53.2	51.1	55.4	53.6	62.2	61.2	55.4
1998	58.6	51.8	50.4	50.4	40.6	46.8	40.3	45.3	42.1	36.3	39.9	45.0
1999	40.3	42.4	39.6	44.6	36.3	45.3	57.2	38.5	42.8	48.9	50.7	49.3
2000	51.1	47.8	47.5	–	–	–	–	–	–	–	–	–
Over 3-month span:												
1997	51.8	51.4	57.6	56.8	54.3	51.8	53.6	55.4	59.7	68.3	65.8	64.4
1998	59.4	57.9	51.8	44.2	41.7	34.9	37.4	37.1	38.1	34.2	35.6	35.3
1999	37.4	31.7	37.1	30.2	33.8	43.9	43.2	44.6	38.5	46.4	50.0	50.4
2000	48.6	49.3	–	–	–	–	–	–	–	–	–	–
Over 6-month span:												
1997	54.7	54.0	51.4	54.3	52.5	52.2	55.4	61.2	61.5	64.7	66.2	65.1
1998	59.7	49.3	48.2	36.7	36.7	36.7	28.4	31.3	33.5	35.3	32.7	28.1
1999	33.1	29.1	28.1	36.0	30.9	34.5	36.3	44.6	45.7	41.4	47.1	48.2
Over 12-month span:												
1997	54.7	52.5	54.0	54.0	55.4	56.8	57.2	57.9	58.3	56.5	55.4	57.2
1998	54.0	49.3	46.0	40.6	35.6	33.8	30.9	32.0	26.6	26.6	25.5	26.3
1999	32.7	25.9	28.4	29.5	29.9	31.7	34.9	33.5	38.8	–	–	–

– Data not available.

NOTE: Figures are the percent of industries with employment increasing plus one-half of the industries with unchanged employment, where 50 percent indicates an equal balance between industries with increasing and decreasing employment. Data for the 2 most recent months shown in each span are preliminary. See the "Definitions" in this section. See "Notes on the data" for a description of the most recent benchmark revision.

18. Annual data: Employment status of the population

[Numbers in thousands]

Employment status	1991	1992	1993	1994	1995	1996	1997	1998	1999
Civilian noninstitutional population	190,925	192,805	194,838	196,814	198,584	200,591	203,133	205,220	207,753
Civilian labor force	126,346	128,105	129,200	131,056	132,304	133,943	136,297	137,673	139,368
Labor force participation rate	66.2	66.4	66.3	66.6	66.6	66.8	67.1	67.1	67.1
Employed	117,718	118,492	120,259	123,060	124,900	126,708	129,558	131,463	133,488
Employment-population ratio	61.7	61.5	61.7	62.5	62.9	63.2	63.8	64.1	64.3
Agriculture	3,269	3,247	3,115	3,409	3,440	3,443	3,399	3,378	3,281
Nonagricultural industries	114,499	115,245	117,144	119,651	121,460	123,264	126,159	128,085	130,207
Unemployed	8,628	9,613	8,940	7,996	7,404	7,236	6,739	6,210	5,880
Unemployment rate	6.8	7.5	6.9	6.1	5.6	5.4	4.9	4.5	4.2
Not in the labor force	64,578	64,700	65,638	65,758	66,280	66,647	66,837	67,547	68,385

19. Annual data: Employment levels by industry

[In thousands]

Industry	1991	1992	1993	1994	1995	1996	1997	1998	1999
Total employment	108,249	108,601	110,713	114,163	117,191	119,608	122,690	125,826	128,615
Private sector	89,847	89,956	91,872	95,036	97,885	100,189	103,133	106,007	108,455
Goods-producing	23,745	23,231	23,352	23,908	24,265	24,493	24,962	25,347	25,240
Mining	689	635	610	601	581	580	596	590	535
Construction	4,650	4,492	4,668	4,986	5,160	5,418	5,691	5,985	6,273
Manufacturing	18,406	18,104	18,075	18,321	18,524	18,495	18,675	18,772	18,432
Service-producing	84,504	85,370	87,361	90,256	92,925	95,115	97,727	100,480	103,375
Transportation and public utilities	5,755	5,718	5,811	5,984	6,132	6,253	6,408	6,600	6,792
Wholesale trade	6,081	5,997	5,981	6,162	6,378	6,482	6,648	6,831	7,004
Retail trade	19,284	19,356	19,773	20,507	21,187	21,597	21,966	22,296	22,787
Finance, insurance, and real estate	6,646	6,602	6,757	6,896	6,806	6,911	7,109	7,407	7,632
Services	28,336	29,052	30,197	31,579	33,117	34,454	36,040	37,526	39,000
Government	18,402	18,645	18,841	19,128	19,305	19,419	19,557	19,819	20,161
Federal	2,966	2,969	2,915	2,870	2,822	2,757	2,699	2,686	2,669
State	4,355	4,408	4,488	4,576	4,635	4,606	4,582	4,612	4,695
Local	11,081	11,267	11,438	11,682	11,849	12,056	12,276	12,521	12,796

NOTE: See "Notes on the data" for a description of the most recent benchmark revision.

20. Annual data: Average hours and earnings of production or nonsupervisory workers on nonfarm payrolls, by industry

Industry	1991	1992	1993	1994	1995	1996	1997	1998	1999
Private sector:									
Average weekly hours	34.3	34.4	34.5	34.7	34.5	34.4	34.6	34.6	34.5
Average hourly earnings (in dollars)	10.32	10.57	10.83	11.12	11.43	11.82	12.28	12.78	13.24
Average weekly earnings (in dollars)	353.98	363.61	373.64	385.86	394.34	406.61	424.89	442.19	456.78
Mining:									
Average weekly hours	44.4	43.9	44.3	44.8	44.7	45.3	45.4	43.9	43.8
Average hourly earnings (in dollars)	14.19	14.54	14.60	14.88	15.30	15.62	16.15	16.90	17.04
Average weekly earnings (in dollars)	630.04	638.31	646.78	666.62	683.91	707.59	733.21	741.91	746.35
Construction:									
Average weekly hours	38.1	38.0	38.5	38.9	38.9	39.0	39.0	38.8	39.0
Average hourly earnings (in dollars)	14.00	14.15	14.38	14.73	15.09	15.47	16.04	16.59	17.13
Average weekly earnings (in dollars)	533.40	537.70	553.63	573.00	587.00	603.33	625.56	643.69	668.07
Manufacturing:									
Average weekly hours	40.7	41.0	41.4	42.0	41.6	41.6	42.0	41.7	41.7
Average hourly earnings (in dollars)	11.18	11.46	11.74	12.07	12.37	12.77	13.17	13.49	13.91
Average weekly earnings (in dollars)	455.03	469.86	486.04	506.94	514.59	531.23	553.14	562.53	580.05
Transportation and public utilities:									
Average weekly hours	38.1	38.3	39.3	39.7	39.4	39.6	39.7	39.5	38.7
Average hourly earnings (in dollars)	13.20	13.43	13.55	13.78	14.13	14.45	14.92	15.31	15.67
Average weekly earnings (in dollars)	502.92	514.37	532.52	547.07	556.72	572.22	592.32	604.75	606.43
Wholesale trade:									
Average weekly hours	38.1	38.2	38.2	38.4	38.3	38.3	38.4	38.4	38.4
Average hourly earnings (in dollars)	11.15	11.39	11.74	12.06	12.43	12.87	13.45	14.06	14.59
Average weekly earnings (in dollars)	424.82	435.10	448.47	463.10	476.07	492.92	516.48	539.90	560.26
Retail trade:									
Average weekly hours	28.6	28.8	28.8	28.9	28.8	28.8	28.9	29.0	29.0
Average hourly earnings (in dollars)	6.94	7.12	7.29	7.49	7.69	7.99	8.33	8.73	9.08
Average weekly earnings (in dollars)	198.48	205.06	209.95	216.46	221.47	230.11	240.74	253.17	263.32
Finance, insurance, and real estate:									
Average weekly hours	35.7	35.8	35.8	35.8	35.9	35.9	36.1	36.4	36.2
Average hourly earnings (in dollars)	10.39	10.82	11.35	11.83	12.32	12.80	13.34	14.06	14.61
Average weekly earnings (in dollars)	370.92	387.36	406.33	423.51	442.29	459.52	481.57	511.78	528.88
Services:									
Average weekly hours	32.4	32.5	32.5	32.5	32.4	32.4	32.6	32.6	32.6
Average hourly earnings (in dollars)	10.23	10.54	10.78	11.04	11.39	11.79	12.28	12.85	13.38
Average weekly earnings (in dollars)	331.45	342.55	350.35	358.80	369.04	382.00	400.33	418.91	436.19

21. Employment Cost Index, compensation,[1] by occupation and industry group

[June 1989 = 100]

Series	1997	1998				1999				Percent change	
	Dec.	Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	3 months ended	12 months ended
										Dec. 1999	
Civilian workers[2]	135.2	136.3	137.4	139.0	139.8	140.4	141.8	143.3	144.6	0.9	3.4
Workers, by occupational group:											
White-collar workers	136.5	137.7	138.7	140.6	141.4	141.9	143.3	145.0	146.3	.9	3.5
Professional specialty and technical	136.7	137.5	138.3	140.0	141.0	141.3	142.2	143.9	145.3	1.0	3.0
Executive, administrative, and managerial	137.3	139.1	139.7	141.7	141.8	143.5	145.4	147.3	148.6	.9	4.8
Administrative support, including clerical	136.9	138.0	139.3	140.4	141.3	142.5	143.4	144.7	146.1	1.0	3.4
Blue-collar workers	132.4	133.2	134.3	135.3	136.1	137.1	138.3	139.5	140.6	.8	3.3
Service occupations	135.6	136.9	137.9	139.4	140.0	141.3	142.4	143.1	144.8	1.2	3.4
Workers, by industry division:											
Goods-producing	134.1	135.1	136.3	137.2	137.9	139.0	140.0	141.2	142.5	.9	3.3
Manufacturing	135.3	136.4	137.2	138.2	138.9	139.9	140.9	142.1	143.6	1.1	3.4
Service-producing	135.5	136.8	137.7	139.6	140.4	140.9	142.4	144.0	145.3	.9	3.5
Services	137.6	138.3	139.0	140.8	141.7	142.3	143.2	145.1	146.5	1.0	3.4
Health services	137.9	138.0	138.5	139.1	139.1	140.5	141.4	142.7	144.3	1.1	3.7
Hospitals	136.7	137.1	138.2	139.4	140.2	141.3	142.2	143.4	145.0	1.1	3.4
Educational services	137.0	137.5	137.7	140.2	141.0	141.3	141.7	144.6	145.8	.8	3.4
Public administration[3]	135.1	136.4	137.4	138.9	139.9	140.8	141.5	142.4	144.4	1.4	3.2
Nonmanufacturing	135.1	136.2	137.3	139.0	139.9	140.5	141.9	143.4	144.7	.9	3.4
Private industry workers	135.1	136.3	137.5	139.0	139.8	140.4	142.0	143.3	144.6	.9	3.4
Excluding sales occupations	135.2	136.4	137.5	138.8	139.4	140.5	141.9	143.2	144.5	.9	3.7
Workers, by occupational group:											
White-collar workers	136.7	138.1	139.4	141.1	142.0	142.4	144.1	145.6	146.9	.9	3.5
Excluding sales occupations	137.4	138.8	139.9	141.3	141.9	143.0	144.5	146.0	147.3	.9	3.8
Professional specialty and technical occupations	137.8	138.8	140.1	141.6	142.6	142.9	144.1	145.2	146.7	1.0	2.9
Executive, administrative, and managerial occupations	137.4	139.4	140.0	141.9	141.8	143.7	145.8	147.7	149.1	.9	5.1
Sales occupations	133.5	135.3	137.3	140.4	142.6	139.6	142.6	144.1	145.3	.8	1.9
Administrative support occupations, including clerical	137.0	138.2	139.6	140.6	141.4	142.6	143.7	145.0	146.2	.8	3.4
Blue-collar workers	132.3	133.1	134.3	135.2	135.9	136.9	138.2	139.4	140.5	.8	3.3
Precision production, craft, and repair occupations	131.9	132.9	134.4	135.4	136.1	137.2	138.4	139.6	140.6	.7	3.3
Machine operators, assemblers, and inspectors	133.0	133.6	134.7	135.7	136.8	137.3	138.4	139.9	141.4	1.1	3.4
Transportation and material moving occupations	128.9	129.3	129.9	130.7	130.7	131.6	133.6	134.4	135.2	.6	3.4
Handlers, equipment cleaners, helpers, and laborers	135.8	137.0	137.6	138.5	139.2	141.0	142.3	143.2	144.4	.8	3.7
Service occupations	134.1	135.3	136.0	137.3	138.0	139.5	140.6	141.0	142.6	1.1	3.3
Production and nonsupervisory occupations[4]	134.2	135.3	136.6	138.0	139.0	139.3	140.8	141.9	143.1	.8	2.9
Workers, by industry division:											
Goods-producing	134.1	135.1	136.2	137.1	137.8	138.9	139.9	141.1	142.5	1.0	3.4
Excluding sales occupations	133.6	134.5	135.6	136.5	137.2	138.3	139.3	140.5	141.8	.9	3.3
White-collar occupations	136.2	137.7	138.8	139.7	140.2	141.7	142.7	143.9	145.5	1.1	3.7
Excluding sales occupations	135.0	136.3	137.4	138.3	138.8	140.4	141.3	142.5	143.9	1.0	3.7
Blue-collar occupations	132.8	133.5	134.6	135.5	136.3	137.1	138.3	139.4	140.7	.9	3.2
Construction	129.7	130.6	132.7	133.4	134.3	135.6	136.9	137.9	138.7	.6	3.3
Manufacturing	135.3	136.4	137.2	138.2	138.9	139.9	140.9	142.1	143.6	1.1	3.4
White-collar occupations	136.7	138.2	139.1	140.1	140.5	141.8	143.0	144.3	145.8	1.0	3.8
Excluding sales occupations	135.3	136.5	137.3	138.3	138.7	140.1	141.3	142.5	143.8	.9	3.7
Blue-collar occupations	134.3	135.0	135.9	136.8	137.7	138.5	139.4	140.5	142.1	1.1	3.2
Durables	135.7	136.5	137.4	138.5	139.2	139.9	141.0	142.3	144.0	1.2	3.4
Nondurables	134.5	135.9	136.7	137.6	138.2	139.6	140.4	141.5	142.8	.9	3.3
Service-producing	135.3	136.7	137.8	139.6	140.5	140.9	142.8	144.1	145.3	.8	3.4
Excluding sales occupations	136.1	137.4	138.5	140.0	140.6	141.7	143.3	144.6	145.9	.9	3.8
White-collar occupations	136.6	138.0	139.3	141.2	142.2	142.3	144.3	145.8	147.0	.8	3.4
Excluding sales occupations	138.1	139.5	140.6	142.2	142.8	143.8	145.5	147.0	148.3	.9	3.9
Blue-collar occupations	130.9	132.1	133.2	134.3	134.8	136.2	137.8	139.1	139.8	.5	3.7
Service occupations	133.9	135.0	135.8	137.0	137.8	139.3	140.5	140.8	142.4	1.1	3.3
Transportation and public utilities	134.2	135.8	137.1	138.5	139.3	139.7	140.9	141.8	142.3	.4	2.2
Transportation	133.4	134.0	134.9	136.7	137.3	136.8	138.1	138.7	139.5	.6	1.6
Public utilities	135.1	137.9	139.7	140.7	141.9	143.4	144.6	145.7	146.1	.3	3.0
Communications	134.0	136.6	139.2	140.5	141.7	143.3	144.9	146.1	146.0	−.1	3.0
Electric, gas, and sanitary services	136.4	139.6	140.3	141.0	142.1	143.4	144.2	145.1	146.1	.7	2.8
Wholesale and retail trade	132.9	134.7	135.8	137.6	138.2	138.9	141.1	142.2	143.5	.9	3.8
Excluding sales occupations	134.0	135.5	136.3	138.1	138.8	139.9	141.9	142.8	144.3	1.1	4.0
Wholesale trade	135.1	137.7	138.6	140.8	142.8	142.7	144.6	146.3	148.5	1.5	4.0
Excluding sales occupations	135.4	137.0	138.2	140.0	141.2	142.4	144.0	145.8	147.4	1.1	4.4
Retail trade	131.7	133.1	134.4	135.9	135.6	136.8	139.1	140.0	140.7	.5	3.8
General merchandise stores	130.0	131.2	133.0	133.2	134.0	135.0	135.6	137.2	138.3	.8	3.2
Food stores	129.4	131.3	132.9	133.7	132.7	134.3	135.7	137.0	138.1	.8	4.1

See footnotes at end of table.

21. Continued—Employment Cost Index, compensation,[1] by occupation and industry group

[June 1989 = 100]

Series	1997	1998				1999				Percent change	
	Dec.	Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	3 months ended	12 months ended
										Dec. 1999	
Finance, insurance, and real estate	134.5	136.7	138.4	141.0	142.5	141.5	145.8	147.6	148.3	0.5	4.1
Excluding sales occupations	137.6	140.2	141.3	143.2	143.3	145.6	148.8	151.0	151.6	.4	5.8
Banking, savings and loan, and other credit agencies	140.6	143.3	145.3	148.4	146.7	148.8	155.4	159.3	159.8	.3	8.9
Insurance	134.8	137.4	138.9	141.9	141.7	141.7	144.0	144.5	145.8	.9	2.9
Services	138.5	139.3	140.3	141.8	142.7	143.5	144.6	146.1	147.6	1.0	3.4
Business services	138.6	139.5	140.7	143.5	145.9	147.5	148.7	150.7	151.9	.8	4.1
Health services	138.1	138.2	138.7	139.0	139.0	140.5	141.4	142.6	144.2	1.1	3.7
Hospitals	136.5	136.7	138.2	139.1	139.9	141.2	142.1	143.0	144.6	1.1	3.4
Educational services	142.6	143.4	143.9	147.0	147.7	148.3	148.7	152.2	153.0	.5	3.6
Colleges and universities	143.7	144.3	144.8	147.8	148.5	149.2	149.6	152.6	153.3	.5	3.2
Nonmanufacturing	134.7	136.0	137.2	138.9	139.7	140.3	142.0	143.4	144.5	.8	3.4
White-collar workers	136.5	137.9	139.2	141.1	142.0	142.3	144.1	145.6	146.9	.9	3.5
Excluding sales occupations	137.9	139.3	140.5	142.0	142.7	143.7	145.3	146.8	148.1	.9	3.8
Blue-collar occupations	130.1	131.0	132.4	133.4	134.0	135.2	136.8	138.0	138.7	.5	3.5
Service occupations	133.8	134.9	135.7	136.9	137.7	139.2	140.4	140.7	142.3	1.1	3.3
State and local government workers	135.7	136.5	136.9	139.0	139.8	140.5	141.0	143.1	144.6	1.0	3.4
Workers, by occupational group:											
White-collar workers	135.5	136.1	136.2	138.4	139.3	139.8	140.2	142.6	144.0	1.0	3.4
Professional specialty and technical	135.1	135.6	135.6	137.7	138.5	138.8	139.3	142.0	143.2	.8	3.4
Executive, administrative, and managerial	136.4	137.5	137.9	140.4	141.6	142.6	142.8	144.5	146.1	1.1	3.2
Administrative support, including clerical	136.1	136.9	137.2	139.5	140.3	141.4	141.3	143.0	145.0	1.4	3.4
Blue-collar workers	134.2	135.0	135.2	136.8	137.8	138.8	139.5	140.9	142.5	1.1	3.4
Workers, by industry division:											
Services	136.0	136.5	136.6	139.0	139.7	140.0	140.5	143.2	144.5	.9	3.4
Services excluding schools[5]	135.3	136.1	136.2	138.7	138.8	139.6	140.3	142.6	143.8	.8	3.6
Health services	137.2	137.9	138.0	140.3	140.7	141.2	142.0	144.2	145.8	1.1	3.6
Hospitals	137.6	138.4	138.4	140.7	141.2	141.7	142.7	144.8	146.3	1.0	3.6
Educational services	135.9	136.3	136.5	138.8	139.6	139.9	140.3	143.1	144.4	.9	3.4
Schools	136.2	136.6	136.7	139.1	139.9	140.2	140.6	143.5	144.7	.8	3.4
Elementary and secondary	135.8	136.1	136.2	138.8	139.3	139.6	140.0	142.9	144.1	.8	3.4
Colleges and universities	137.2	137.9	138.1	140.4	141.5	141.7	142.1	144.8	146.5	1.2	3.5
Public administration[3]	135.1	136.4	137.4	138.9	139.9	140.8	141.5	142.4	144.4	1.4	3.2

[1] Cost (cents per hour worked) measured in the Employment Cost Index consists of wages, salaries, and employer cost of employee benefits.

[2] Consists of private industry workers (excluding farm and household workers) and State and local government (excluding Federal Government) workers.

[3] Consists of legislative, judicial, administrative, and regulatory activities.

[4] This series has the same industry and occupational coverage as the Hourly Earnings index, which was discontinued in January 1989.

[5] Includes, for example, library, social, and health services.

22. Employment Cost Index, wages and salaries, by occupation and industry group

[June 1989 = 100]

Series	1997	1998				1999				Percent change	
	Dec.	Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	3 months ended	12 months ended
										Dec. 1999	
Civilian workers[1]	132.8	134.0	135.0	136.8	137.7	138.4	139.8	141.3	142.5	0.8	3.5
Workers, by occupational group:											
White-collar workers	134.3	135.6	136.7	138.8	139.7	140.1	141.6	143.3	144.6	.9	3.5
Professional specialty and technical	135.0	135.8	136.6	138.5	139.4	140.1	141.0	142.6	144.0	1.0	3.3
Executive, adminitrative, and managerial	135.6	137.4	138.3	140.5	140.3	141.6	143.8	145.9	147.2	.9	4.9
Administrative support, including clerical	133.7	135.0	136.2	137.5	138.6	140.0	140.9	142.3	143.5	.8	3.5
Blue-collar workers	129.3	130.4	131.4	132.6	133.3	134.5	135.8	137.0	137.9	.7	3.5
Service occupations	132.6	133.7	134.5	136.1	137.0	138.3	139.4	140.1	141.7	1.1	3.4
Workers, by industry division:											
Goods-producing	130.6	132.0	133.3	134.4	135.2	136.3	137.4	138.6	139.7	.8	3.3
Manufacturing	132.2	133.7	134.6	136.0	136.8	137.9	139.0	140.2	141.5	.9	3.4
Service-producing	133.6	134.8	135.7	137.8	138.7	139.2	140.7	142.3	143.5	.8	3.5
Services	136.0	136.9	137.6	139.6	140.5	141.5	142.3	144.1	145.5	1.0	3.6
Health services	135.4	136.2	136.5	137.6	137.6	138.8	139.7	140.9	142.5	1.1	3.6
Hospitals	133.6	134.2	135.1	136.4	137.1	138.1	138.8	140.1	141.6	1.1	3.3
Educational services	135.9	136.3	136.5	139.1	140.0	140.2	140.6	143.7	144.7	.7	3.4
Public administration [2]	131.4	132.7	133.2	134.8	135.9	136.9	137.8	139.5	141.5	1.4	4.1
Nonmanufacturing	132.8	134.0	135.1	137.0	137.8	138.4	139.9	141.5	142.6	.8	3.5
Private industry workers	132.3	133.7	134.9	136.6	137.4	138.1	139.7	141.0	142.2	.9	3.5
Excluding sales occupations	132.4	133.7	134.8	136.3	136.9	138.2	139.6	140.8	142.0	.9	3.7
Workers, by occupational group:											
White-collar workers	134.2	135.7	137.0	139.0	139.9	140.3	142.1	143.5	144.8	.9	3.5
Excluding sales occupations	134.8	136.3	137.5	139.1	139.7	141.0	142.5	143.9	145.2	.9	3.9
Professional specialty and technical occupations	134.8	135.9	137.1	138.7	139.7	140.7	141.8	142.6	144.1	1.1	3.1
Executive, adminitrative, and managerial occupations	135.8	137.8	138.7	140.9	140.5	141.9	144.3	146.4	147.6	.8	5.1
Sales occupations	131.4	133.1	135.2	138.8	141.3	137.3	140.5	142.1	143.3	.8	1.4
Administrative support occupations, including clerical	133.9	135.3	136.7	137.9	138.9	140.4	141.4	142.7	143.8	.8	3.5
Blue-collar workers	129.1	130.2	131.3	132.4	133.2	134.3	135.6	136.8	137.7	.7	3.4
Precision production, craft, and repair occupations	128.7	129.8	131.2	132.3	133.0	134.3	135.6	136.7	137.5	.6	3.4
Machine operators, assemblers, and inspectors	130.6	131.6	132.7	133.8	134.9	135.7	136.7	138.3	139.5	.9	3.4
Transportation and material moving occupations	125.1	125.9	126.4	127.6	127.8	129.1	131.0	131.9	132.7	.6	3.8
Handlers, equipment cleaners, helpers, and laborers	131.8	133.2	133.7	135.1	135.8	137.3	138.3	139.4	140.4	.7	3.4
Service occupations	131.1	132.1	133.0	134.4	135.3	136.7	137.8	138.0	139.6	1.2	3.2
Production and nonsupervisory occupations[3]	131.2	132.3	133.6	135.2	136.4	136.8	138.2	139.3	140.4	.8	2.9
Workers, by industry division:											
Goods-producing	130.6	132.0	133.2	134.3	135.2	136.3	137.3	138.5	139.7	.9	3.3
Excluding sales occupations	130.0	131.3	132.5	133.6	134.4	135.5	136.6	137.8	138.9	.8	3.3
White-collar occupations	132.9	135.0	136.3	137.4	138.2	139.4	140.5	141.7	143.0	.9	3.5
Excluding sales occupations	131.6	133.3	134.6	135.7	136.4	137.8	138.8	140.1	141.3	.9	3.6
Blue-collar occupations	129.2	130.1	131.3	132.3	133.3	134.3	135.4	136.6	137.6	.7	3.2
Construction	124.9	126.0	128.1	128.5	129.3	130.7	131.9	133.0	133.6	.5	3.3
Manufacturing	132.2	133.7	134.6	136.0	136.8	137.9	139.0	140.2	141.5	.9	3.4
White-collar occupations	133.6	135.6	136.8	138.3	139.0	140.1	141.4	142.7	144.0	.9	3.6
Excluding sales occupations	132.2	133.8	135.0	136.3	137.1	138.3	139.6	140.8	142.0	.9	3.6
Blue-collar occupations	131.2	132.3	133.1	134.3	135.3	136.3	137.2	138.4	139.7	.9	3.3
Durables	131.9	133.4	134.5	135.9	136.9	137.9	139.1	140.4	141.8	1.0	3.6
Nondurables	132.6	134.2	134.9	136.0	136.8	138.0	138.7	139.7	140.9	.9	3.0
Service-producing	133.1	134.4	135.6	137.6	138.4	138.9	140.8	142.1	143.3	.8	3.5
Excluding sales occupations	133.9	135.2	136.2	137.9	138.5	139.8	141.4	142.6	143.8	.8	3.8
White-collar occupations	134.3	135.7	137.0	139.2	140.1	140.3	142.3	143.8	145.0	.8	3.5
Excluding sales occupations	135.9	137.3	138.4	140.2	140.7	142.0	143.7	145.1	146.4	.9	4.1
Blue-collar occupations	128.9	130.2	131.1	132.4	132.9	134.4	135.9	137.0	137.8	.6	3.7
Service occupations	131.0	132.1	133.0	134.2	135.2	136.7	137.8	138.0	139.6	1.2	3.3
Transportation and public utilities	131.3	132.1	132.8	134.3	135.1	135.4	136.8	137.5	137.9	.3	2.1
Transportation	129.5	130.1	130.4	132.4	132.9	132.3	133.7	134.4	134.9	.4	1.5
Public utilities	133.5	134.5	135.7	136.5	137.8	139.2	140.6	141.5	141.8	.2	2.9
Communications	134.0	134.4	135.8	136.7	138.0	139.4	141.1	141.9	142.2	.2	3.0
Electric, gas, and sanitary services	132.9	134.7	135.6	136.3	137.4	138.9	140.0	140.9	141.3	.3	2.8
Wholesale and retail trade	131.6	133.3	134.6	136.6	137.0	137.7	139.6	140.7	142.0	.9	3.6
Excluding sales occupations	133.2	134.7	135.6	137.6	138.2	139.5	141.1	141.8	143.3	1.1	3.7
Wholesale trade	133.6	136.2	137.1	139.3	141.3	140.7	142.3	144.3	146.5	1.5	3.7
Excluding sales occupations	135.0	136.5	137.8	139.6	140.8	141.9	143.0	144.8	146.4	1.1	4.0
Retail trade	130.6	131.9	133.3	135.2	134.8	136.2	138.3	138.9	139.6	.5	3.6
General merchandise stores	128.4	129.4	131.5	132.2	133.0	133.7	134.3	135.6	136.7	.8	2.8
Food stores	127.0	129.0	130.5	131.7	130.5	131.8	132.8	133.9	134.9	.7	3.4

See footnotes at end of table.

22. Continued—Employment Cost Index, wages and salaries, by occupation and industry group

[June 1989 = 100]

Series	1997	1998				1999				Percent change	
	Dec.	Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	3 months ended	12 months ended
										Dec. 1999	
Finance, insurance, and real estate	130.6	132.6	134.8	138.1	139.8	137.2	142.4	144.5	145.2	0.5	3.9
Excluding sales occupations	133.6	135.9	137.5	139.7	139.6	141.0	144.8	147.5	148.0	.3	6.0
Banking, savings and loan, and other credit agencies	138.3	140.9	143.2	147.0	144.4	146.1	154.5	159.2	159.6	.3	10.5
Insurance	130.2	133.1	134.8	138.7	138.5	137.4	139.8	140.2	141.5	.9	2.2
Services	136.2	137.2	138.3	140.0	140.8	142.2	143.2	144.5	146.0	1.0	3.7
Business services	137.3	137.6	139.2	141.8	144.1	145.4	146.3	148.5	149.8	.9	4.0
Health services	135.4	136.2	136.5	137.5	137.4	138.7	139.6	140.6	142.2	1.1	3.5
Hospitals	133.2	133.6	134.7	135.8	136.5	137.6	138.3	139.3	140.9	1.1	3.2
Educational services	138.4	139.1	139.6	142.8	143.5	143.9	144.2	147.5	148.2	.5	3.3
Colleges and universities	138.7	139.1	139.7	142.8	143.6	144.1	144.4	147.2	147.9	.5	3.0
Nonmanufacturing	132.1	133.4	134.7	136.5	137.4	137.9	139.7	141.0	142.1	.8	3.4
White-collar workers	134.1	135.5	136.8	138.9	139.8	140.1	142.0	143.5	144.7	.8	3.5
Excluding sales occupations	135.5	136.9	138.1	139.8	140.3	141.6	143.2	144.6	145.9	.9	4.0
Blue-collar occupations	127.1	128.2	129.5	130.5	131.1	132.4	134.0	135.1	135.8	.5	3.6
Service occupations	130.9	132.0	132.9	134.1	135.1	136.5	137.7	137.9	139.5	1.2	3.3
State and local government workers	134.4	135.1	135.4	137.6	138.5	139.0	139.6	142.2	143.5	.9	3.6
Workers, by occupational group:											
White-collar workers	134.5	135.0	135.2	137.6	138.5	138.9	139.3	142.1	143.4	.9	3.5
Professional specialty and technical	135.1	135.5	135.6	137.9	138.7	138.9	139.4	142.5	143.6	.8	3.5
Executive, administrative, and managerial	134.1	135.1	135.6	138.0	139.3	140.1	140.5	142.7	144.3	1.1	3.6
Administrative support, including clerical	132.3	133.0	133.3	135.4	136.5	137.4	137.5	139.6	141.7	1.5	3.8
Blue-collar workers	132.3	133.1	133.5	135.1	136.0	136.9	137.6	139.4	140.7	.9	3.5
Workers, by industry division:											
Services	135.3	135.7	135.9	138.4	139.2	139.5	139.9	142.9	144.0	.8	3.4
Services excluding schools [4]	134.4	135.4	135.5	137.8	138.2	139.0	139.6	142.1	143.2	.8	3.6
Health services	135.3	136.3	136.5	138.7	139.2	139.7	140.4	142.8	144.2	1.0	3.6
Hospitals	135.2	136.3	136.5	138.6	139.1	139.7	140.6	142.8	144.1	.9	3.6
Educational services	135.3	135.7	135.8	138.4	139.3	139.5	139.8	142.9	144.0	.8	3.4
Schools	135.5	135.8	136.0	138.5	139.5	139.6	140.0	143.1	144.2	.8	3.4
Elementary and secondary	135.7	136.0	136.1	138.7	139.3	139.5	139.9	143.1	144.1	.7	3.4
Colleges and universities	134.6	135.2	135.5	137.7	139.6	139.6	139.8	142.6	144.4	1.3	3.4
Public administration [2]	131.4	132.7	133.2	134.8	135.9	136.9	137.8	139.5	141.5	1.4	4.1

[1] Consists of private industry workers (excluding farm and household workers) and State and local government (excluding Federal Government) workers.

[2] Consists of legislative, judicial, administrative, and regulatory activities.

[3] This series has the same industry and occupational coverage as the Hourly Earnings index, which was discontinued in January 1989.

[4] Includes, for example, library, social, and health services.

23. Employment Cost Index, benefits, private industry workers by occupation and industry group

[June 1989 = 100]

Series	1997	1998				1999				Percent change	
	Dec.	Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	3 months ended	12 months ended
										Dec. 1999	
Private industry workers	141.8	142.6	143.7	144.5	145.2	145.8	147.3	148.6	150.2	1.1	3.4
Workers, by occupational group:											
White-collar workers	143.4	144.7	145.6	146.6	147.4	147.9	149.4	151.0	152.5	1.0	3.5
Blue-collar workers	139.0	139.1	140.4	141.0	141.6	142.2	143.6	144.8	146.2	1.0	3.2
Workers, by industry division:											
Goods-producing	141.5	141.5	142.5	143.0	143.2	144.3	145.2	146.3	148.2	1.3	3.4
Service-producing	141.4	142.7	143.8	144.9	145.7	146.1	147.9	149.4	150.7	.9	3.4
Manufacturing	141.7	141.7	142.4	142.6	142.7	143.6	144.5	145.7	147.8	1.4	3.4
Nonmanufacturing	141.5	142.7	143.9	145.0	145.8	146.3	148.0	149.4	150.7	.9	3.4

24. Employment Cost Index, private nonfarm workers by bargaining status, region, and area size

[June 1989 = 100]

Series	1997	1998				1999				Percent change	
	Dec.	Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	3 months ended	12 months ended
										Dec. 1999	
COMPENSATION											
Workers, by bargaining status[1]											
Union	133.5	134.0	135.3	136.8	137.5	138.0	139.0	140.2	141.2	0.7	2.7
Goods-producing	132.5	132.7	134.3	135.6	136.5	136.8	138.2	139.2	140.8	1.1	3.2
Service-producing	134.5	135.3	136.2	138.0	138.5	139.2	139.7	141.0	141.4	.3	2.1
Manufacturing	133.3	133.6	134.6	136.0	136.9	137.0	138.1	139.1	141.0	1.4	3.0
Nonmanufacturing	133.2	133.9	135.3	136.9	137.4	138.1	139.2	140.3	140.8	.4	2.5
Nonunion	135.3	136.7	137.8	139.3	140.1	140.8	142.5	143.8	145.2	1.0	3.6
Goods-producing	134.7	135.9	136.9	137.7	138.3	139.7	140.5	141.8	143.1	.9	3.5
Service-producing	135.3	136.7	138.0	139.7	140.6	141.1	143.0	144.4	145.7	.9	3.6
Manufacturing	135.9	137.2	138.0	138.9	139.4	140.7	141.7	143.0	144.4	1.0	3.5
Nonmanufacturing	134.9	136.3	137.5	139.1	140.0	140.6	142.4	143.8	145.1	.9	3.6
Workers, by region[1]											
Northeast	135.0	136.0	137.0	138.7	139.5	140.5	141.5	143.2	144.3	.8	3.4
South	134.6	135.5	136.4	137.6	138.1	139.1	140.7	141.8	143.0	.8	3.5
Midwest (formerly North Central)	136.9	138.3	139.6	140.9	141.4	141.7	143.6	145.0	146.3	.9	3.5
West	133.4	135.2	136.6	138.5	140.0	140.3	142.1	143.3	144.7	1.0	3.4
Workers, by area size[1]											
Metropolitan areas	135.1	136.4	137.5	139.1	139.8	140.4	142.0	143.3	144.7	1.0	3.5
Other areas	135.3	135.9	137.1	138.2	139.4	140.5	141.8	143.1	143.6	.3	3.0
WAGES AND SALARIES											
Workers, by bargaining status[1]											
Union	128.9	129.6	130.7	132.4	133.1	133.6	134.7	135.7	136.5	.6	2.6
Goods-producing	127.1	127.9	129.4	131.0	131.7	132.3	133.8	134.9	136.1	.9	3.3
Service-producing	131.2	131.8	132.2	134.1	134.8	135.4	135.8	136.8	137.2	.3	1.8
Manufacturing	128.6	129.6	130.4	132.2	133.0	133.6	134.7	135.8	137.5	1.3	3.4
Nonmanufacturing	129.1	129.6	130.8	132.4	133.1	133.7	134.6	135.6	135.9	.2	2.1
Nonunion	133.0	134.5	135.7	137.4	138.3	139.0	140.7	142.0	143.3	.9	3.6
Goods-producing	132.0	133.6	134.7	135.7	136.5	137.8	138.8	140.0	141.1	.8	3.4
Service-producing	133.2	134.6	135.9	137.9	138.8	139.3	141.3	142.6	143.9	.9	3.7
Manufacturing	133.5	135.1	136.2	137.3	138.2	139.4	140.5	141.7	142.9	.8	3.4
Nonmanufacturing	132.6	134.0	135.3	137.1	138.0	138.6	140.5	141.8	143.0	.8	3.6
Workers, by region[1]											
Northeast	131.6	132.6	133.8	135.4	136.4	137.1	138.2	139.9	140.9	.7	3.3
South	133.0	134.0	134.9	136.5	136.7	137.9	139.4	140.2	141.5	.9	3.5
Midwest (formerly North Central)	133.0	134.7	136.0	137.5	138.0	138.9	141.0	142.4	143.6	.8	4.1
West	131.2	132.9	134.5	136.7	138.4	138.2	140.2	141.3	142.6	.9	3.0
Workers, by area size[1]											
Metropolitan areas	132.3	133.8	135.1	136.9	137.7	138.3	139.9	141.2	142.5	.9	3.5
Other areas	132.0	132.5	133.4	134.7	136.0	137.1	138.4	139.8	140.2	.3	3.1

[1] The indexes are calculated differently from those for the occupation and industry groups. For a detailed description of the index calculation, see the *Monthly Labor Review* Technical Note, "Estimation procedures for the Employment Cost Index," May 1982.

25. Percent of full-time employees participating in employer-provided benefit plans, and in selected features within plans, medium and large private establishments, selected years, 1980–97

Item	1980	1982	1984	1986	1988	1989	1991	1993	1995	1997
Scope of survey (in 000's)	21,352	21,043	21,013	21,303	31,059	32,428	31,163	28,728	33,374	38,409
Number of employees (in 000's):										
With medical care	20,711	20,412	20,383	20,238	27,953	29,834	25,865	23,519	25,546	29,340
With life insurance	20,498	20,201	20,172	20,451	28,574	30,482	29,293	26,175	29,078	33,495
With defined benefit plan	17,936	17,676	17,231	16,190	19,567	20,430	18,386	16,015	17,417	19,202
Time-off plans										
Participants with:										
Paid lunch time	10	9	9	10	11	10	8	9	–	–
Average minutes per day	–	25	26	27	29	26	30	29	–	–
Paid rest time	75	76	73	72	72	71	67	68	–	–
Average minutes per day	–	25	26	26	26	26	28	26	–	–
Paid funeral leave	–	–	–	88	85	84	80	83	80	81
Average days per occurrence	–	–	–	3.2	3.2	3.3	3.3	3.0	3.3	3.7
Paid holidays	99	99	99	99	96	97	92	91	89	89
Average days per year	10.1	10.0	9.8	10.0	9.4	9.2	10.2	9.4	9.1	9.3
Paid personal leave	20	24	23	25	24	22	21	21	22	20
Average days per year	–	3.8	3.6	3.7	3.3	3.1	3.3	3.1	3.3	3.5
Paid vacations	100	99	99	100	98	97	96	97	96	95
Paid sick leave [1]	62	67	67	70	69	68	67	65	58	56
Unpaid maternity leave	–	–	–	–	33	37	37	60	–	–
Unpaid paternity leave	–	–	–	–	16	18	26	53	–	–
Unpaid family leave	–	–	–	–	–	–	–	–	84	93
Insurance plans										
Participants in medical care plans	97	97	97	95	90	92	83	82	77	76
Percent of participants with coverage for:										
Home health care	–	–	46	66	76	75	81	86	78	85
Extended care facilities	58	62	62	70	79	80	80	82	73	78
Physical exam	–	–	8	18	28	28	30	42	56	63
Percent of participants with employee contribution required for:										
Self coverage	26	27	36	43	44	47	51	61	67	69
Average monthly contribution	–	–	$11.93	$12.80	$19.29	$25.31	$26.60	$31.55	$33.92	$39.14
Family coverage	46	51	58	63	64	66	69	76	78	80
Average monthly contribution	–	–	$35.93	$41.40	$60.07	$72.10	$96.97	$107.42	$118.33	$130.07
Participants in life insurance plans	96	96	96	96	92	94	94	91	87	87
Percent of participants with:										
Accidental death and dismemberment insurance	69	72	74	72	78	71	71	76	77	74
Survivor income benefits	–	–	–	10	8	7	6	5	7	6
Retiree protection available	–	64	64	59	49	42	44	41	37	33
Participants in long-term disability insurance plans	40	43	47	48	42	45	40	41	42	43
Participants in sickness and accident insurance plans	54	51	51	49	46	43	45	44	–	–
Participants in short-term disability plans [1]	–	–	–	–	–	–	–	–	53	55
Retirement plans										
Participants in defined benefit pension plans	84	84	82	76	63	63	59	56	52	50
Percent of participants with:										
Normal retirement prior to age 65	55	58	63	64	59	62	55	52	52	52
Early retirement available	98	97	97	98	98	97	98	95	96	95
Ad hoc pension increase in last 5 years	–	–	47	35	26	22	7	6	4	10
Terminal earnings formula	53	52	54	57	55	64	56	61	58	56
Benefit coordinated with Social Security	45	45	56	62	62	63	54	48	51	49
Participants in defined contribution plans	–	–	–	60	45	48	48	49	55	57
Participants in plans with tax-deferred savings arrangements	–	–	–	33	36	41	44	43	54	55
Other benefits										
Employees eligible for:										
Flexible benefits plans	–	–	–	2	5	9	10	12	12	13
Reimbursement accounts [2]	–	–	–	5	12	23	36	52	38	32
Premium conversion plans	–	–	–	–	–	–	–	–	5	7

[1] The definitions for paid sick leave and short-term disability (previously sickness and accident insurance) were changed for the 1995 survey. Paid sick leave now includes only plans that specify either a maximum number of days per year or unlimited days. Short-terms disability now includes all insured, self-insured, and State-mandated plans available on a per-disability basis, as well as the unfunded per-disability plans previously reported as sick leave. Sickness and accident insurance, reported in years prior to this survey, included only insured, self-insured, and State-mandated plans providing per-disability benefits at less than full pay.

[2] Prior to 1995, reimbursement accounts included premium conversion plans, which specifically allow medical plan participants to pay required plan premiums with pretax dollars. Also, reimbursement accounts that were part of flexible benefit plans were tabulated separately.

NOTE: Dash indicates data not available.

26. Percent of full-time employees participating in employer-provided benefit plans, and in selected features within plans, small private establishments and State and local governments, 1987, 1990, 1992, 1994, and 1996

Item	Small private establishments				State and local governments			
	1990	1992	1994	1996	1987	1990	1992	1994
Scope of survey (in 000's)	32,466	34,360	35,910	39,816	10,321	12,972	12,466	12,907
Number of employees (in 000's):								
With medical care	22,402	24,396	23,536	25,599	9,599	12,064	11,219	11,192
With life insurance	20,778	21,990	21,955	24,635	8,773	11,415	11,095	11,194
With defined benefit plan	6,493	7,559	5,480	5,883	9,599	11,675	10,845	11,708
Time-off plans								
Participants with:								
Paid lunch time	8	9	–	–	17	11	10	–
Average minutes per day	37	37	–	–	34	36	34	–
Paid rest time	48	49	–	–	58	56	53	–
Average minutes per day	27	26	–	–	29	29	29	–
Paid funeral leave	47	50	50	51	56	63	65	62
Average days per occurrence	2.9	3.0	3.1	3.0	3.7	3.7	3.7	3.7
Paid holidays	84	82	82	80	81	74	75	73
Average days per year[1]	9.5	9.2	7.5	7.6	10.9	13.6	14.2	11.5
Paid personal leave	11	12	13	14	38	39	38	38
Average days per year	2.8	2.6	2.6	3.0	2.7	2.9	2.9	3.0
Paid vacations	88	88	88	86	72	67	67	66
Paid sick leave [2]	47	53	50	50	97	95	95	94
Unpaid leave	17	18	–	–	57	51	59	–
Unpaid paternity leave	8	7	–	–	30	33	44	–
Unpaid family leave	–	–	47	48	–	–	–	93
Insurance plans								
Participants in medical care plans	69	71	66	64	93	93	90	87
Percent of participants with coverage for:								
Home health care	79	80	–	–	76	82	87	84
Extended care facilities	83	84	–	–	78	79	84	81
Physical exam	26	28	–	–	36	36	47	55
Percent of participants with employee contribution required for:								
Self coverage	42	47	52	52	35	38	43	47
Average monthly contribution	$25.13	$36.51	$40.97	$42.63	$15.74	$25.53	$28.97	$30.20
Family coverage	67	73	76	75	71	65	72	71
Average monthly contribution	$109.34	$150.54	$159.63	$181.53	$71.89	$117.59	$139.23	$149.70
Participants in life insurance plans	64	64	61	62	85	88	89	87
Percent of participants with:								
Accidental death and dismemberment insurance	78	76	79	77	67	67	74	64
Survivor income benefits	1	1	2	1	1	1	1	2
Retiree protection available	19	25	20	13	55	45	46	46
Participants in long-term disability insurance plans	19	23	20	22	31	27	28	30
Participants in sickness and accident insurance plans	6	26	26	–	14	21	22	21
Participants in short-term disability plans [2]	–	–	–	29	–	–	–	–
Retirement plans								
Participants in defined benefit pension plans	20	22	15	15	93	90	87	91
Percent of participants with:								
Normal retirement prior to age 65	54	50	–	47	92	89	92	92
Early retirement available	95	95	–	92	90	88	89	87
Ad hoc pension increase in last 5 years	7	4	–	–	33	16	10	13
Terminal earnings formula	58	54	–	53	100	100	100	99
Benefit coordinated with Social Security	49	46	–	44	18	8	10	49
Participants in defined contribution plans	31	33	34	38	9	9	9	9
Participants in plans with tax-deferred savings arrangements	17	24	23	28	28	45	45	24
Other benefits								
Employees eligible for:								
Flexible benefits plans	1	2	3	4	5	5	5	5
Reimbursement accounts [3]	8	14	19	12	5	31	50	64
Premium conversion plans	–	–	–	7	–	–	–	–

[1] Methods used to calculate the average number of paid holidays were revised in 1994 to count partial days more precisely. Average holidays for 1994 are not comparable with those reported in 1990 and 1992.

[2] The definitions for paid sick leave and short-term disability (previously sickness and accident insurance) were changed for the 1996 survey. Paid sick leave now includes only plans that specify either a maximum number of days per year or unlimited days. Short-term disability now includes all insured, self-insured, and State-mandated plans available on a per-disability basis, as well as the unfunded per-disability plans previously reported as sick leave. Sickness and accident insurance, reported in years prior to this survey, included only insured, self-insured, and State-mandated plans providing per-disability benefits at less than full pay.

[3] Prior to 1996, reimbursement accounts included premium conversion plans, which specifically allow medical plan participants to pay required plan premiums with pretax dollars. Also, reimbursement accounts that were part of flexible benefit plans were tabulated separately.

NOTE: Dash indicates data not available.

27. Work stoppages involving 1,000 workers or more

Measure	Annual totals		1998			1999									
	1997	1998	Oct.	Nov.	Dec.	Jan.[P]	Feb.[P]	Mar.[P]	Apr.[P]	May[P]	June[P]	July[P]	Aug.[P]	Sept.[P]	Oct.[P]
Number of stoppages:															
Beginning in period	29	34	5	3	3	1	2	0	1	3	2	1	1	2	0
In effect during period	34	34	7	7	6	5	5	2	3	6	6	6	3	5	2
Workers involved:															
Beginning in period (in thousands)	339	387	8.0	7.1	3.8	1.4	4.1	.0	8.0	9.6	2.2	1.7	11.0	19.1	.0
In effect during period (in thousands)	351	387	10.6	13.7	10.4	9.2	10.3	4.4	12.4	22.0	21.6	16.3	15.4	34.5	10.1
Days idle:															
Number (in thousands)	4,497	5,116	148.7	160.3	171.0	129.0	104.1	101.2	256.8	314.8	309.4	266.4	118.8	176.2	67.1
Percent of estimated working time[1]	.01	.02	.01	.01	.01	.01	.00	.00	.01	.01	.01	.01	.00	.01	.00

[1] Agricultural and government employees are included in the total employed and total working time; private household, forestry, and fishery employees are excluded. An explanation of the measurement of idleness as a percentage of the total time worked is found in " 'Total economy' measures of strike idleness," *Monthly Labor Review*, October 1968, pp. 54–56.

[P] = preliminary.

28. Consumer Price Indexes for All Urban Consumers and for Urban Wage Earners and Clerical Workers: U.S. city average, by expenditure category and commodity or service group

[1982–84 = 100, unless otherwise indicated]

Series	Annual average		1999										2000		
	1998	1999	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
CONSUMER PRICE INDEX FOR ALL URBAN CONSUMERS															
All items	163.0	166.6	165.0	166.2	166.2	166.2	166.7	167.1	167.9	168.2	168.3	168.3	168.7	169.7	171.1
All items (1967 = 100)	488.3	499.0	494.4	497.8	497.7	497.9	499.2	500.7	502.9	503.9	504.1	504.1	505.5	508.4	512.5
Food and beverages	161.1	164.6	163.7	163.9	164.2	164.1	164.2	164.7	165.1	165.5	165.7	165.9	166.6	166.8	167.1
Food	160.7	164.1	163.3	163.4	163.7	163.6	163.8	164.2	164.6	165.1	165.2	165.4	166.1	166.3	166.5
Food at home	161.1	164.2	163.4	163.5	163.9	163.7	163.7	164.1	164.5	165.1	165.1	165.4	166.3	166.3	166.4
Cereals and bakery products	181.1	185.0	183.5	184.8	185.1	185.7	186.3	184.9	185.2	185.2	184.8	185.9	185.6	186.0	186.1
Meats, poultry, fish, and eggs	147.3	147.9	146.8	146.7	146.7	147.2	147.3	148.5	149.2	149.2	150.5	149.8	150.2	151.3	152.4
Dairy and related products[1]	150.8	159.6	161.5	156.1	156.2	156.1	155.7	156.5	158.7	164.1	164.6	162.1	160.4	160.9	159.1
Fruits and vegetables	198.2	203.1	199.9	203.3	207.2	203.2	202.0	202.1	202.6	202.2	201.2	204.5	208.4	203.0	201.7
Nonalcoholic beverages and beverage materials	133.0	134.3	134.5	134.3	134.2	134.3	134.3	134.5	134.2	134.6	133.9	134.7	137.1	138.4	138.5
Other foods at home	150.8	153.5	152.9	153.6	153.4	153.6	153.7	154.2	153.9	153.7	153.0	153.3	154.3	154.4	155.1
Sugar and sweets	150.2	152.3	151.0	151.7	153.0	152.4	152.4	152.7	153.5	153.3	152.1	152.3	154.8	154.4	154.6
Fats and oils	146.9	148.3	149.4	149.0	147.2	147.5	148.1	148.6	148.5	149.0	145.3	145.1	147.0	145.6	145.9
Other foods	165.5	168.9	168.1	169.2	168.7	169.2	169.3	169.9	169.2	168.7	169.0	169.4	169.8	170.5	171.6
Other miscellaneous foods[1,2]	102.6	104.9	104.9	105.6	105.0	104.9	104.2	104.8	105.3	104.3	103.9	105.7	104.3	106.4	107.0
Food away from home[1]	161.1	165.1	164.2	164.5	164.6	164.6	165.1	165.6	165.8	166.2	166.5	166.8	167.2	167.6	167.9
Other food away from home[1,2]	101.6	105.2	103.7	104.0	104.3	104.4	105.5	105.8	106.4	106.8	106.9	106.9	107.5	107.9	107.9
Alcoholic beverages	165.7	169.7	168.4	168.8	169.3	169.5	169.9	170.2	170.7	170.5	171.2	171.8	172.4	173.0	173.5
Housing	160.4	163.9	162.8	163.0	163.0	164.1	164.7	165.0	165.2	165.0	164.9	164.8	165.8	166.9	167.6
Shelter	182.1	187.3	186.3	186.6	186.5	187.2	188.0	188.3	188.3	188.5	188.6	188.6	189.8	190.7	191.8
Rent of primary residence	172.1	177.5	176.0	176.4	176.7	177.1	177.5	177.9	178.4	178.8	179.8	180.3	180.8	181.2	181.7
Lodging away from home[2]	109.0	112.3	114.5	114.6	111.8	113.8	117.1	117.1	113.8	113.1	108.5	105.8	111.3	115.1	120.9
Owners' equivalent rent of primary residence[3]	187.8	192.9	191.5	191.9	192.2	192.6	193.0	193.4	193.9	194.2	194.9	195.2	195.7	196.1	196.4
Tenants' and household insurance[1,2]	99.8	101.3	100.2	100.3	100.5	102.2	102.1	102.2	102.3	102.2	102.1	102.2	102.4	102.4	102.6
Fuels and utilities	128.5	128.8	125.9	125.7	126.5	130.2	131.1	131.4	132.7	130.3	130.0	129.6	129.9	132.9	131.8
Fuels	113.7	113.5	110.5	110.2	111.0	115.1	116.0	116.2	117.6	115.0	114.6	114.1	114.3	117.6	116.3
Fuel oil and other fuels	90.0	91.4	86.2	87.7	87.7	87.3	87.5	89.2	93.9	97.6	100.7	106.3	114.4	147.2	130.1
Gas (piped) and electricity	121.2	120.9	117.9	117.5	118.4	123.0	124.0	124.1	125.3	122.0	121.4	120.3	119.8	120.6	120.7
Household furnishings and operations	126.6	126.7	126.7	127.2	126.7	126.8	126.8	126.8	127.0	126.6	126.4	126.4	127.0	127.2	127.9
Apparel	133.0	131.3	132.7	135.2	134.2	130.9	127.3	127.5	131.8	134.6	133.6	130.1	126.8	129.2	132.5
Men's and boys' apparel	131.8	131.1	131.4	133.5	133.8	131.4	128.3	127.1	130.5	134.0	133.2	131.5	129.2	130.0	131.5
Women's and girls' apparel	126.0	123.3	126.3	128.7	127.3	122.6	116.1	117.9	125.4	128.4	126.6	121.8	116.0	120.0	125.9
Infants' and toddlers' apparel[1]	126.1	129.0	125.6	128.2	127.6	126.8	127.4	128.3	129.9	132.4	132.6	133.0	133.3	133.1	133.9
Footwear	128.0	125.7	126.4	129.2	127.4	125.4	125.2	123.8	124.7	126.1	126.4	123.7	121.6	122.1	124.7
Transportation	141.6	144.4	140.6	144.3	144.2	143.4	144.7	145.7	146.5	147.3	147.6	148.3	148.3	149.7	153.4
Private transportation	137.9	140.5	136.4	140.1	140.2	139.7	140.6	141.9	142.9	143.3	143.6	144.4	144.4	145.6	149.2
New and used motor vehicles[2]	100.1	100.1	99.6	99.7	99.7	99.7	99.8	99.7	100.1	100.5	100.9	101.1	100.8	100.3	100.4
New vehicles	143.4	142.9	143.4	143.3	142.9	142.5	142.0	141.4	141.6	142.3	143.1	143.6	143.3	143.0	143.3
Used cars and trucks[1]	150.6	152.0	147.4	148.3	149.6	150.9	152.3	153.8	155.7	156.4	156.1	155.0	153.9	153.0	153.0
Motor fuel	92.2	100.7	86.3	100.9	101.4	99.2	102.5	107.8	110.3	110.0	109.3	112.2	112.6	118.1	131.7
Gasoline (all types)	91.6	100.1	85.8	100.4	100.8	98.6	101.9	107.2	109.7	109.4	108.7	111.5	111.9	117.3	130.9
Motor vehicle parts and equipment	101.1	100.5	100.1	100.3	100.2	100.1	100.0	100.1	100.6	100.5	101.2	100.8	100.8	100.9	101.4
Motor vehicle maintenance and repair	167.1	171.9	170.6	170.9	171.3	171.7	172.1	172.1	172.8	173.2	173.6	173.8	174.6	175.2	175.7
Public transportation	190.3	197.7	198.8	201.4	198.4	192.6	200.8	197.1	194.7	201.5	202.2	201.2	199.5	204.2	209.8
Medical care	242.1	250.6	248.3	249.1	249.5	250.2	251.1	251.9	252.3	252.8	253.3	254.2	255.5	257.0	258.1
Medical care commodities	221.8	230.7	227.7	229.3	229.4	230.5	231.7	232.5	233.1	233.2	233.7	234.6	235.2	235.5	236.3
Medical care services	246.8	255.1	253.1	253.5	254.0	254.6	255.5	256.2	256.6	257.1	257.7	258.5	260.1	262.0	263.2
Professional services	222.2	229.2	227.4	228.2	228.6	229.3	229.8	230.1	230.4	230.9	231.4	231.7	233.1	234.9	236.1
Hospital and related services	287.5	299.5	296.6	296.3	297.0	297.6	299.3	301.3	302.1	302.9	303.9	306.3	308.4	310.5	311.5
Recreation[2]	101.1	102.1	101.8	102.0	102.2	102.2	102.2	102.2	101.7	101.8	101.9	102.0	102.3	102.5	102.9
Video and audio[1,2]	101.1	100.7	101.2	101.0	100.9	100.7	100.6	100.9	100.1	100.1	100.1	100.1	100.5	100.8	100.9
Education and communication[2]	100.3	101.2	100.8	100.7	100.4	100.3	100.4	101.2	101.9	102.1	102.2	102.3	102.7	102.2	102.0
Education[2]	102.1	107.0	105.4	105.5	105.6	105.7	106.0	107.5	109.4	109.6	109.3	109.3	110.2	110.6	110.6
Educational books and supplies	250.8	261.7	261.4	261.2	261.6	262.1	262.3	264.5	267.0	269.0	255.7	256.0	273.9	278.3	276.9
Tuition, other school fees, and child care	294.2	308.4	303.5	303.8	304.1	304.4	305.4	309.9	315.3	315.9	316.3	316.3	317.3	318.0	318.3
Communication[1,2]	98.7	96.0	96.6	96.3	95.7	95.5	95.5	95.6	95.3	95.3	95.9	95.9	96.0	94.7	94.3
Information and information processing[1,2]	98.5	95.5	96.1	95.8	95.2	94.9	94.9	95.0	94.7	94.7	95.3	95.4	95.5	94.1	93.6
Telephone services[1,2]	100.7	100.1	100.2	100.0	99.6	99.7	99.5	99.8	99.6	99.8	100.6	100.7	100.9	99.4	98.9
Information and information processing other than telephone services[1,4]	39.9	30.5	32.4	32.1	30.9	29.8	30.0	29.8	29.3	28.7	28.2	28.2	28.0	27.6	27.2
Personal computers and peripheral equipment[1,2]	78.2	53.5	57.6	56.8	55.7	54.5	52.9	50.9	49.7	48.2	47.0	47.2	46.4	45.1	44.2
Other goods and services	237.7	258.3	253.3	256.1	255.8	255.9	258.3	257.6	262.6	263.2	263.0	263.0	264.7	266.7	268.0
Tobacco and smoking products	274.8	355.8	335.9	349.9	345.5	343.2	356.0	350.1	373.8	373.3	369.8	369.1	375.1	383.0	387.3
Personal care[1]	156.7	161.1	160.0	160.2	160.7	161.1	161.1	161.4	161.8	162.4	162.8	162.9	163.4	163.8	164.3
Personal care products[1]	148.3	151.8	150.8	150.9	150.9	152.6	152.0	152.3	153.0	153.4	153.3	152.5	152.8	152.6	153.5
Personal care services[1]	166.0	171.4	169.9	170.3	171.0	170.9	171.4	171.9	172.1	172.9	173.9	174.3	174.9	175.6	176.2

28. Continued—Consumer Price Indexes for All Urban Consumers and for Urban Wage Earners and Clerical Workers: U.S. city average, by expenditure category and commodity or service group

[1982–84 = 100, unless otherwise indicated]

Series	Annual average		1999										2000		
	1998	1999	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
Miscellaneous personal services	234.7	243.0	241.1	241.4	242.1	242.4	242.9	243.9	244.6	245.6	246.0	246.6	247.6	248.9	249.4
Commodity and service group:															
Commodities	141.9	144.4	142.6	144.6	144.5	143.9	143.9	144.5	145.8	146.4	146.2	146.1	146.2	147.4	149.2
Food and beverages	161.1	164.6	163.7	163.9	164.2	164.1	164.2	164.7	165.1	165.5	165.7	165.9	166.6	166.8	167.1
Commodities less food and beverages	130.5	132.5	130.2	133.2	132.8	131.9	131.9	132.5	134.3	134.9	134.6	134.4	134.0	135.7	138.4
Nondurables less food and beverages	132.6	137.5	133.2	138.6	138.2	136.6	136.7	138.0	141.0	141.9	141.3	140.9	140.5	143.9	148.5
Apparel	133.0	131.3	132.7	135.2	134.2	130.9	127.3	127.5	131.8	134.6	133.6	130.1	126.8	129.2	132.5
Nondurables less food, beverages, and apparel	137.4	146.0	138.5	145.7	145.6	144.8	146.8	148.8	151.2	151.2	150.7	152.1	153.1	157.2	162.7
Durables	127.6	126.0	126.0	126.1	125.8	125.7	125.6	125.4	125.7	125.9	126.0	125.9	125.7	125.3	125.6
Services	184.2	188.8	187.6	187.8	187.9	188.6	189.5	189.9	190.1	190.2	190.5	190.5	191.4	192.2	193.1
Rent of shelter[3]	189.6	195.0	193.9	194.3	194.2	194.9	195.7	196.1	196.1	196.3	196.3	196.3	197.6	198.5	199.7
Transporatation services	187.9	190.7	190.7	191.0	190.4	189.3	191.0	190.2	189.9	191.9	192.7	192.8	193.0	193.7	195.0
Other services	216.9	223.1	221.3	221.7	221.9	222.2	222.6	223.9	224.5	225.1	226.0	226.5	227.4	227.4	227.8
Special indexes:															
All items less food	163.4	167.0	165.3	166.7	166.6	166.7	167.2	167.7	168.5	168.8	168.8	168.8	169.2	170.3	171.9
All items less shelter	157.2	160.2	158.5	159.9	159.9	159.7	160.1	160.6	161.6	162.0	162.1	162.1	162.3	163.3	164.8
All items less medical care	158.6	162.0	160.5	161.6	161.6	161.6	162.0	162.5	163.2	163.6	163.6	163.6	164.0	164.9	166.3
Commodities less food	132.0	134.0	131.7	134.6	134.3	133.4	133.4	134.0	135.8	136.3	136.1	135.9	135.6	137.2	139.9
Nondurables less food	134.6	139.4	135.3	140.4	140.1	138.6	138.7	139.9	142.8	143.7	143.1	142.8	142.4	145.7	150.1
Nondurables less food and apparel	139.2	147.5	140.5	147.0	147.0	146.3	148.2	150.0	152.3	152.3	151.9	153.2	154.2	158.0	163.0
Nondurables	146.9	151.2	148.5	151.4	151.4	150.5	150.6	151.5	153.2	154.0	153.7	153.6	153.7	155.6	158.1
Services less rent of shelter[3]	191.8	195.8	194.2	194.5	194.7	195.6	196.5	196.9	197.3	197.4	197.9	198.0	198.6	199.2	199.9
Services less medical care services	178.4	182.7	181.5	181.8	181.8	182.6	183.4	183.8	183.9	184.1	184.3	184.3	185.1	185.8	186.7
Energy	102.9	106.6	98.4	105.0	105.6	106.8	108.7	111.3	113.2	111.6	111.2	112.2	112.5	116.7	122.2
All items less energy	170.9	174.4	173.7	174.2	174.1	174.0	174.3	174.5	175.1	175.7	175.8	175.7	176.2	176.8	177.7
All items less food and energy	173.4	177.0	176.2	176.8	176.6	176.6	176.9	177.1	177.7	178.3	178.4	178.2	178.7	179.4	180.4
Commodities less food and energy	143.2	144.1	143.9	144.9	144.5	143.7	143.2	143.0	144.6	145.3	145.0	144.2	143.6	144.2	145.3
Energy commodities	92.1	100.0	86.4	99.9	100.3	98.3	101.3	106.3	109.1	109.1	108.7	111.8	112.8	120.6	131.7
Services less energy	190.6	195.7	194.7	195.0	195.0	195.3	196.1	196.5	196.6	197.2	197.5	197.7	198.7	199.5	200.5
CONSUMER PRICE INDEX FOR URBAN WAGE EARNERS AND CLERICAL WORKERS															
All items	159.7	163.2	161.4	162.7	162.8	162.8	163.3	163.8	164.7	165.0	165.1	165.1	165.5	166.4	167.8
All items (1967 = 100)	475.6	486.2	480.9	484.7	484.9	485.0	486.3	487.8	490.5	491.5	491.7	491.8	492.9	495.6	499.7
Food and beverages	160.4	163.8	162.9	163.0	163.3	163.3	163.4	163.9	164.3	164.7	164.9	165.2	165.9	166.1	166.4
Food	160.0	163.4	162.6	162.6	162.9	162.8	163.0	163.5	163.9	164.4	164.5	164.7	165.4	165.6	165.9
Food at home	160.0	163.0	162.3	162.2	162.6	162.5	162.5	162.9	163.5	164.0	164.0	164.2	165.1	165.1	165.3
Cereals and bakery products	180.9	184.7	183.2	184.5	184.8	185.5	186.1	184.8	185.0	185.0	184.5	185.7	185.5	185.8	185.9
Meats, poultry, fish, and eggs	147.0	147.6	146.4	146.3	146.1	146.9	146.8	148.2	148.9	148.8	150.1	149.4	149.8	150.8	152.0
Dairy and related products[1]	150.4	159.4	161.5	155.7	155.8	155.7	155.3	156.0	158.4	164.0	164.6	161.9	159.9	160.4	158.7
Fruits and vegetables	197.0	201.8	198.7	201.7	205.3	201.9	201.0	201.2	201.6	201.0	199.8	202.8	207.0	201.7	200.5
Nonalcoholic beverages and beverage materials	131.8	133.2	133.6	133.2	133.1	133.2	133.1	133.2	133.0	133.4	132.7	133.5	136.0	137.6	137.8
Other foods at home	150.2	152.8	152.3	153.0	152.6	152.8	153.0	153.5	153.3	152.9	152.3	152.7	153.7	153.8	154.5
Sugar and sweets	150.1	152.2	151.1	151.7	152.8	152.0	152.0	152.6	153.3	153.2	152.0	152.3	154.8	154.3	154.5
Fats and oils	146.5	147.9	148.9	148.6	147.0	147.2	147.8	148.3	148.1	148.6	144.9	144.7	146.8	145.2	145.7
Other foods	165.4	168.8	168.0	169.0	168.5	169.0	169.2	169.7	169.2	168.5	168.8	169.4	169.8	170.5	171.6
Other miscellaneous foods[1,2]	102.6	104.6	105.0	105.2	104.7	104.4	103.9	104.4	105.1	103.8	103.4	105.2	103.9	106.2	106.7
Food away from home[1]	161.1	165.0	164.1	164.4	164.5	164.4	164.9	165.5	165.8	166.1	166.5	166.8	167.1	167.6	167.9
Other food away from home[1,2]	101.6	105.1	103.8	104.1	104.2	104.5	105.3	105.8	106.2	106.6	106.8	106.9	107.4	107.8	107.8
Alcoholic beverages	164.6	168.8	167.3	167.8	168.5	168.7	169.1	169.2	169.8	169.5	170.4	171.0	171.6	172.2	172.8
Housing	156.7	160.0	158.8	159.1	159.2	160.2	160.7	161.0	161.3	161.0	161.1	161.1	161.8	162.7	163.2
Shelter	176.6	181.6	180.5	180.8	180.9	181.5	182.0	182.4	182.6	182.8	183.1	183.3	184.1	184.8	185.6
Rent of primary residence	171.7	177.1	175.6	176.0	176.4	176.8	177.1	177.5	178.0	178.4	179.3	179.9	180.3	180.7	181.2
Lodging away from home[2]	109.0	122.2	114.2	114.5	112.0	113.8	116.7	116.8	113.8	113.1	108.4	105.7	110.8	114.5	119.9
Owners' equivalent rent of primary residence[3]	171.1	175.7	174.5	174.8	175.1	175.4	175.7	176.1	176.5	176.8	177.4	177.8	178.2	178.6	178.8
Tenants' and household insurance[1,2]	100.0	101.6	100.6	100.6	100.9	102.3	102.2	102.3	102.5	102.4	102.3	102.4	102.6	102.6	102.8
Fuels and utilities	128.4	128.7	125.8	125.5	126.3	130.2	131.1	131.4	132.6	130.1	129.8	129.2	129.5	132.0	131.2
Fuels	113.3	113.0	110.0	109.7	110.6	114.7	115.7	115.9	117.2	114.4	114.0	113.5	113.6	116.3	115.4
Fuel oil and other fuels	90.3	91.7	85.8	88.1	88.0	87.8	87.6	89.3	93.9	97.7	100.7	106.0	114.0	144.5	129.6
Gas (piped) and electricity	120.8	120.4	117.3	116.9	117.9	122.6	123.6	123.7	124.9	121.5	120.9	119.8	119.4	120.1	120.2
Household furnishings and operations	125.0	124.7	124.9	125.2	124.8	124.8	124.9	124.7	124.8	124.5	124.2	124.2	124.5	124.6	125.3
Apparel	131.6	130.1	131.1	133.7	133.0	129.6	126.4	126.4	130.5	133.1	132.3	129.0	125.9	127.9	131.0
Men's and boys' apparel	131.4	131.2	131.6	133.6	134.0	131.6	128.6	127.2	130.3	134.0	133.3	131.6	129.3	129.9	131.5
Women's and girls' apparel	123.9	121.3	123.9	126.5	125.5	120.6	114.4	116.0	123.3	126.0	124.4	119.8	114.2	118.0	123.5
Infants' and toddlers' apparel[1]	126.7	130.3	126.5	129.3	128.9	128.0	128.4	129.6	131.4	134.1	134.3	134.8	134.9	134.7	135.7
Footwear	128.7	126.2	126.8	129.5	127.9	125.8	125.8	124.4	125.1	126.6	126.9	124.2	122.3	122.6	124.7
Transportation	140.5	143.4	139.1	142.9	143.1	142.4	143.7	145.0	146.0	146.6	146.9	147.6	147.7	149.1	152.9
Private transportation	138.0	140.7	136.2	140.1	140.3	139.9	140.9	142.4	143.6	143.9	144.2	145.0	145.1	146.4	150.1
New and used motor vehicles[2]	100.3	100.4	99.5	99.7	99.8	100.0	100.1	100.2	100.7	101.2	101.5	101.5	101.2	100.7	100.8

28. Continued—Consumer Price Indexes for All Urban Consumers and for Urban Wage Earners and Clerical Workers: U.S. city average, by expenditure category and commodity or service group

[1982–84 = 100, unless otherwise indicated]

Series	Annual average		1999										2000		
	1998	1999	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
New vehicles	144.6	144.0	144.5	144.5	144.0	143.6	143.2	142.6	142.8	143.5	144.3	144.7	144.5	144.2	144.5
Used cars and trucks[1]	152.0	153.3	148.7	149.6	150.9	152.2	153.7	155.2	157.0	157.7	157.3	156.3	155.3	154.4	154.4
Motor fuel	92.2	100.8	86.4	100.8	101.3	99.2	102.6	107.8	110.6	110.0	109.5	112.3	112.9	118.6	132.0
Gasoline (all types)	91.7	100.2	85.9	100.3	100.8	98.7	102.1	107.3	110.0	109.4	108.9	111.7	112.3	117.9	131.2
Motor vehicle parts and equipment	100.5	100.0	99.8	99.6	99.7	99.6	99.5	99.6	99.9	99.8	100.6	100.2	100.3	100.5	100.9
Motor vehicle maintenance and repair	168.2	173.3	172.0	172.3	172.7	173.1	173.5	173.5	174.3	174.7	175.1	175.2	176.1	176.6	177.2
Public transportation	187.1	193.1	194.1	196.4	193.9	189.0	195.7	192.5	190.7	196.3	197.0	196.0	194.8	198.8	203.4
Medical care	241.4	249.7	247.5	248.2	248.7	249.4	250.3	251.0	251.4	251.9	252.5	253.2	254.5	256.2	257.3
Medical care commodities	218.6	226.8	223.9	225.7	225.7	226.6	227.8	228.4	229.0	229.1	229.5	230.2	230.7	231.0	231.8
Medical care services	246.6	254.9	252.8	253.3	253.8	254.5	255.3	256.0	256.4	257.0	257.6	258.4	259.9	261.9	263.1
Professional services	223.7	230.8	228.9	229.7	230.2	231.0	231.4	231.7	232.0	232.5	233.1	233.4	234.8	236.7	238.0
Hospital and related services	283.6	295.5	292.8	292.3	293.0	293.6	295.3	297.3	298.2	298.9	299.8	302.1	304.1	306.4	307.5
Recreation[2]	100.9	101.3	101.3	101.4	101.5	101.6	101.6	101.5	101.0	101.1	101.0	101.2	101.4	101.6	102.0
Video and audio[1,2]	101.1	100.5	101.0	100.8	100.6	100.5	100.4	100.7	99.8	99.9	99.9	99.8	100.2	100.4	100.6
Education and communication[2]	100.4	101.5	101.0	100.9	100.7	100.7	100.8	101.5	102.1	102.3	102.5	102.5	103.0	102.5	102.2
Education[2]	102.1	107.2	105.6	105.7	105.9	106.0	106.3	107.7	109.5	109.7	109.4	109.4	110.5	110.9	111.0
Educational books and supplies	253.1	264.1	264.0	263.9	264.3	264.8	265.0	267.2	269.9	271.8	256.5	256.9	276.6	281.3	280.0
Tuition, other school fees, and child care	288.5	302.8	298.0	298.3	298.7	299.2	300.2	304.1	309.5	310.0	310.4	310.4	311.7	312.7	312.8
Communication[1,2]	99.1	96.9	97.4	97.0	96.5	96.4	96.3	96.5	96.2	96.3	96.9	97.0	97.1	95.7	95.3
Information and information processing[1,2]	99.0	96.5	97.1	96.7	96.2	96.0	96.0	96.1	95.8	95.9	96.6	96.6	96.7	95.3	94.8
Telephone services[1,2]	100.7	100.2	100.4	100.0	99.8	99.9	99.7	99.9	99.7	100.0	100.8	100.9	101.1	99.6	99.1
Information and information processing other than telephone services[1,4]	41.2	31.6	33.5	33.0	31.8	30.8	31.1	30.8	30.3	29.9	29.3	29.3	28.9	28.6	28.2
Personal computers and peripheral equipment[1,2]	77.9	53.1	56.9	55.9	55.1	54.0	52.5	50.6	49.4	48.1	46.9	46.9	45.7	44.5	43.6
Other goods and services	236.1	261.9	255.6	259.5	258.8	258.7	262.0	260.7	267.3	267.9	267.4	267.3	269.3	271.7	273.3
Tobacco and smoking products	274.8	356.2	336.0	350.5	345.9	343.5	356.6	350.6	374.4	374.0	370.4	369.7	375.7	383.6	387.8
Personal care[1]	156.8	161.3	160.3	160.4	160.8	161.3	161.3	161.6	161.9	162.6	163.0	163.1	163.5	163.9	164.3
Personal care products[1]	149.3	152.5	151.6	151.7	151.6	153.3	152.7	153.1	153.7	154.1	154.0	153.1	153.4	153.2	154.1
Personal care services[1]	166.3	171.7	170.2	170.6	171.4	171.2	171.8	172.2	172.4	173.2	174.4	174.7	175.3	176.1	176.6
Miscellaneous personal services	234.0	243.1	241.4	241.7	242.3	242.6	243.2	243.8	244.5	245.5	245.9	246.7	247.6	248.9	249.4
Commodity and service group:															
Commodities	141.8	144.7	142.5	144.7	144.6	144.0	144.2	144.8	146.3	146.8	146.6	146.6	146.6	147.8	149.8
Food and beverages	160.4	163.8	162.9	163.0	163.3	163.3	163.4	163.9	164.3	164.7	164.9	165.2	165.9	166.1	166.4
Commodities less food and beverages	130.6	133.2	130.3	133.6	133.4	132.5	132.7	133.4	135.4	165.9	135.6	135.4	135.1	136.8	139.6
Nondurables less food and beverages	132.1	138.1	133.1	139.1	138.8	137.0	137.5	138.8	142.1	142.9	142.2	142.0	141.7	145.1	150.2
Apparel	131.6	130.1	131.1	133.7	133.0	129.6	126.4	126.4	130.5	133.1	132.3	129.0	125.9	127.9	131.0
Nondurables less food, beverages, and apparel	137.0	147.2	138.7	146.7	146.6	145.7	148.1	150.2	153.2	153.1	152.5	153.9	155.0	159.3	165.7
Durables	127.3	126.0	125.7	125.8	125.6	125.6	125.7	125.7	126.1	126.3	126.4	126.3	126.0	125.6	125.8
Services	181.0	185.3	184.0	184.2	184.4	185.2	185.9	186.3	186.6	186.7	187.1	187.2	187.9	188.5	189.2
Rent of shelter[3]	170.1	174.9	173.8	174.1	174.2	174.7	175.3	175.6	175.8	176.1	176.3	176.5	177.3	178.0	178.7
Transporatation services	185.4	187.9	187.8	187.9	187.5	186.7	188.0	187.4	187.3	189.0	189.8	189.9	190.2	190.8	191.8
Other services	213.7	219.6	217.8	218.1	218.4	218.8	219.2	220.3	220.9	221.6	222.3	222.9	223.8	223.7	224.0
Special indexes:															
All items less food	159.5	163.1	161.1	162.6	162.6	162.7	163.2	163.7	164.7	165.0	165.1	165.1	165.4	166.4	168.0
All items less shelter	155.0	158.1	156.1	157.7	157.7	157.6	158.0	158.6	159.7	160.1	160.1	160.1	160.3	161.3	162.8
All items less medical care	155.8	159.2	157.5	158.8	158.8	158.8	159.2	159.7	160.7	161.0	161.1	161.1	161.4	162.3	163.6
Commodities less food	132.0	134.6	131.8	135.0	134.8	133.9	134.2	134.8	136.7	137.2	137.0	136.8	136.5	138.2	141.0
Nondurables less food	134.1	140.0	135.1	140.8	140.6	138.9	139.4	140.7	143.8	144.6	144.0	143.8	143.6	146.8	151.7
Nondurables less food and apparel	138.7	148.4	140.5	147.9	147.9	147.0	149.3	151.2	154.0	153.8	153.4	154.7	155.8	159.8	165.7
Nondurables	146.5	151.3	148.3	151.4	151.4	150.5	150.8	151.7	153.6	154.3	154.0	154.0	154.2	156.0	158.8
Services less rent of shelter[3]	170.7	174.1	172.6	172.7	173.0	174.0	174.7	175.0	175.5	175.4	175.8	175.9	176.4	176.9	177.4
Services less medical care services	175.4	179.5	178.2	178.4	178.6	179.4	180.1	180.4	180.7	180.8	181.1	181.2	181.9	182.4	183.1
Energy	102.1	106.1	97.5	104.5	105.2	106.2	108.4	111.1	113.1	111.4	111.0	112.1	112.5	116.7	122.9
All items less energy	167.6	171.1	170.2	170.7	170.7	170.6	170.9	171.1	171.8	172.4	172.6	172.5	172.8	173.3	174.1
All items less food and energy	169.6	173.1	172.2	172.9	172.8	172.7	172.9	173.1	173.9	174.5	174.7	174.5	174.8	175.3	176.2
Commodities less food and energy	142.7	144.3	143.7	144.8	144.5	143.8	143.5	143.3	145.0	145.7	145.4	144.6	144.1	144.6	145.6
Energy commodities	92.3	100.3	86.6	100.2	100.6	98.6	101.8	106.8	109.7	109.4	109.1	112.1	113.1	120.4	132.0
Services less energy	187.7	192.6	191.5	191.8	191.9	192.2	192.8	193.2	193.4	194.0	194.4	194.7	195.5	196.2	196.9

[1] Not seasonally adjusted.

[2] Indexes on a December 1997 = 100 base.

[3] Indexes on a December 1982 = 100 base.

[4] Indexes on a December 1988 = 100 base.

– Data not available.

NOTE: Index applies to a month as a whole, not to any specific date.

29. Consumer Price Index: U.S. city average and available local area data: all items

[1982–84 = 100, unless otherwise indicated]

Area	Pricing schedule[1]	All Urban Consumers							Urban Wage Earners						
		1999				2000			1999				2000		
		Feb.	Mar.	Nov.	Dec.	Jan.	Feb.	Mar.	Feb.	Mar.	Nov.	Dec.	Jan.	Feb.	Mar.
U.S. city average	M	164.5	165.0	168.3	168.3	168.7	169.7	171.1	161.1	161.4	165.1	165.1	165.5	166.4	167.8
Region and area size[2]															
Northeast urban	M	171.6	171.9	175.5	175.5	176.1	177.4	178.3	168.3	168.5	172.6	172.6	173.0	174.3	175.1
Size A—More than 1,500,000	M	172.4	172.8	176.5	176.3	176.9	178.3	179.2	168.1	168.3	172.7	172.4	172.8	174.1	174.9
Size B/C—50,000 to 1,500,000[3]	M	103.0	103.2	105.1	105.4	105.8	106.7	107.2	102.6	102.8	105.0	105.2	105.5	106.3	106.8
Midwest urban[4]	M	160.5	161.0	164.6	164.4	164.8	165.8	167.0	156.5	156.9	160.9	160.7	161.2	162.1	163.4
Size A—More than 1,500,000	M	161.8	162.4	165.6	165.5	166.1	167.2	168.3	157.2	157.5	161.0	161.1	161.6	162.7	163.8
Size B/C—50,000 to 1,500,000[3]	M	102.6	103.0	105.6	105.3	105.5	106.0	106.8	102.2	102.6	105.5	105.3	105.5	106.1	106.9
Size D—Nonmetropolitan (less than 50,000)	M	155.6	155.7	159.3	158.9	159.0	159.8	161.5	153.4	153.4	157.6	157.3	157.6	158.3	160.0
South urban	M	160.0	160.6	163.5	163.6	164.0	164.7	166.4	158.0	158.4	161.8	162.0	162.2	163.0	164.6
Size A—More than 1,500,000	M	158.9	159.7	162.9	163.0	163.5	164.1	165.9	156.4	156.9	160.6	160.9	161.2	161.8	163.4
Size B/C—50,000 to 1,500,000[3]	M	103.0	103.3	105.1	105.2	105.3	105.9	106.9	102.3	102.8	104.9	105.0	105.1	105.7	106.7
Size D—Nonmetropolitan (less than 50,000)	M	160.9	161.5	164.1	163.5	164.4	165.1	166.8	161.0	161.5	165.0	164.6	165.1	165.8	167.6
West urban	M	166.9	167.3	170.4	170.5	171.0	171.9	173.4	162.7	163.2	166.2	166.4	166.7	167.4	169.1
Size A—More than 1,500,000	M	167.8	168.2	171.6	171.7	172.3	173.3	174.9	161.9	162.3	165.7	165.8	166.3	167.1	168.7
Size B/C—50,000 to 1,500,000[3]	M	103.8	104.1	105.5	105.7	105.7	106.2	107.1	103.6	104.0	105.3	105.5	105.5	105.9	106.8
Size classes:															
A[5]	M	149.0	149.5	152.5	152.5	153.0	154.0	155.2	147.4	147.7	151.2	151.2	151.6	152.5	153.6
B/C[3]	M	103.0	103.3	105.3	105.3	105.5	106.1	106.9	102.6	102.9	105.0	105.2	105.3	105.9	106.8
D	M	160.7	161.1	164.2	163.7	164.3	164.9	166.7	159.4	159.8	163.5	163.1	163.5	164.1	165.9
Selected local areas[6]															
Chicago–Gary–Kenosha, IL–IN–WI	M	166.4	167.0	169.3	169.2	170.1	171.3	172.0	160.6	161.1	163.7	163.7	164.5	165.6	166.4
Los Angeles–Riverside–Orange County, CA	M	164.6	165.0	167.1	167.3	167.9	169.2	170.6	158.1	158.3	160.6	160.9	161.2	162.4	163.9
New York, NY–Northern NJ–Long Island, NY–NJ–CT–PA	M	175.1	175.5	178.8	178.6	179.2	180.4	181.4	170.6	170.8	174.6	174.3	174.6	175.8	176.6
Boston–Brockton–Nashua, MA–NH–ME–CT	1	–	174.8	179.2	–	180.2	–	182.7	–	172.3	177.8	–	178.6	–	181.1
Cleveland–Akron, OH	1	–	161.2	163.8	–	164.4	–	166.8	–	152.9	156.1	–	156.8	–	159.2
Dallas–Ft Worth, TX	1	–	156.4	160.1	–	160.4	–	163.1	–	155.8	159.8	–	160.3	–	162.9
Washington–Baltimore, DC–MD–VA–WV[7]	1	–	103.2	105.0	–	105.3	–	107.0	–	102.8	104.9	–	105.3	–	106.9
Atlanta, GA	2	161.9	–	–	167.0	–	167.4	–	159.1	–	–	164.6	–	164.9	–
Detroit–Ann Arbor–Flint, MI	2	161.2	–	–	165.6	–	167.2	–	155.8	–	–	160.4	–	162.0	–
Houston–Galveston–Brazoria, TX	2	146.6	–	–	150.3	–	152.1	–	145.0	–	–	149.2	–	150.5	–
Miami–Ft. Lauderdale, FL	2	161.4	–	–	164.8	–	165.9	–	158.8	–	–	162.7	–	163.5	–
Philadelphia–Wilmington–Atlantic City, PA–NJ–DE–MD	2	168.6	–	–	172.9	–	174.7	–	167.8	–	–	172.8	–	174.5	–
San Francisco–Oakland–San Jose, CA	2	169.4	–	–	174.5	–	176.5	–	165.7	–	–	170.9	–	172.5	–
Seattle–Tacoma–Bremerton, WA	2	170.6	–	–	174.4	–	176.0	–	166.0	–	–	170.1	–	171.5	–

[1] Foods, fuels, and several other items priced every month in all areas; most other goods and services priced as indicated:
M—Every month.
1—January, March, May, July, September, and November.
2—February, April, June, August, October, and December.

[2] Regions defined as the four Census regions.

[3] Indexes on a December 1996 = 100 base.

[4] The "North Central" region has been renamed the "Midwest" region by the Census Bureau. It is composed of the same geographic entities.

[5] Indexes on a December 1986 = 100 base.

[6] In addition, the following metropolitan areas are published semiannually and appear in tables 34 and 39 of the January and July issues of the *CPI Detailed Report*: Anchorage, AK; Cincinnati–Hamilton, OH–KY–IN; Denver–Boulder–Greeley, CO; Honolulu, HI; Kansas City, MO–KS; Milwaukee–Racine, WI; Minneapolis–St. Paul, MN–WI; Pittsburgh, PA; Portland–Salem, OR–WA; St Louis, MO–IL; San Diego, CA; Tampa–St. Petersburg–Clearwater, FL.

[7] Indexes on a November 1996 = 100 base.

– Data not available.

NOTE: Local area CPI indexes are byproducts of the national CPI program. Each local index has a smaller sample size and is, therefore, subject to substantially more sampling and other measurement error. As a result, local area indexes show greater volatility than the national index, although their long-term trends are similar. Therefore, the Bureau of Labor Statistics strongly urges users to consider adopting the national average CPI for use in their escalator clauses. Index applies to a month as a whole, not to any specific date.

30. Annual data: Consumer Price Index, U.S. city average, all items and major groups

[1982–84 = 100]

Series	1991	1992	1993	1994	1995	1996	1997	1998	1999
Consumer Price Index for All Urban Consumers:									
All items:									
Index	136.2	140.3	144.5	148.2	152.4	156.9	160.5	163.0	166.6
Percent change	4.2	3.0	3.0	2.6	2.8	3.0	2.3	1.6	2.2
Food and beverages:									
Index	136.8	138.7	141.6	144.9	148.9	153.7	157.7	161.1	164.6
Percent change	3.6	1.4	2.1	2.3	2.8	3.2	2.6	2.2	2.2
Housing:									
Index	133.6	137.5	141.2	144.8	148.5	152.8	156.8	160.4	163.9
Percent change	4.0	2.9	2.7	2.5	2.6	2.9	2.6	2.3	2.2
Apparel:									
Index	128.7	131.9	133.7	133.4	132.0	131.7	132.9	133.0	131.3
Percent change	3.7	2.5	1.4	–.2	–1.0	–.2	.9	.1	–1.3
Transportation:									
Index	123.8	126.5	130.4	134.3	139.1	143.0	144.3	141.6	144.4
Percent change	2.7	2.2	3.1	3.0	3.6	2.8	0.9	–1.9	2.0
Medical care:									
Index	177.0	190.1	201.4	211.0	220.5	228.2	234.6	242.1	250.6
Percent change	8.7	7.4	5.9	4.8	4.5	3.5	2.8	3.2	3.5
Other goods and services:									
Index	171.6	183.3	192.9	198.5	206.9	215.4	224.8	237.7	258.3
Percent change	7.9	6.8	5.2	2.9	4.2	4.1	4.4	5.7	8.7
Consumer Price Index for Urban Wage Earners and Clerical Workers:									
All items:									
Index	134.3	138.2	142.1	145.6	149.8	154.1	157.6	159.7	163.2
Percent change	4.1	2.9	2.8	2.5	2.9	2.9	2.3	1.3	2.2

31. Producer Price Indexes, by stage of processing

[1982 = 100]

Grouping	Annual average		1999										2000		
	1998	1999[P]	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
Finished goods	130.7	133.1	131.1	131.9	132.4	132.7	132.9	133.7	134.7	135.1	134.9	135.0	134.7	136.0	137.0
Finished consumer goods	128.9	132.1	129.4	130.4	131.2	131.7	132.1	133.2	134.6	134.5	134.3	134.4	134.0	135.6	137.0
Finished consumer foods	134.3	135.1	134.7	133.4	134.5	135.1	134.6	135.9	136.7	135.8	135.4	135.7	135.0	135.9	135.9
Finshed consumer goods excluding foods	126.4	130.6	127.0	129.0	129.6	130.0	130.8	131.9	133.5	133.7	133.6	133.7	133.3	135.4	137.3
Nondurable goods less food	122.2	127.9	122.9	125.7	126.6	127.5	128.9	130.4	132.8	131.5	131.6	131.8	131.3	134.3	137.0
Durable goods	132.9	133.0	133.1	133.1	132.8	132.3	131.7	131.6	131.2	134.9	134.6	134.6	134.2	134.0	134.0
Capital equipment	137.6	137.6	137.7	137.8	137.6	137.2	137.0	136.9	136.7	138.5	138.3	138.3	138.4	138.4	138.5
Intermediate materials, supplies, and components	123.0	123.2	120.7	121.6	122.2	123.0	123.9	124.6	125.3	125.0	125.2	125.6	125.9	126.8	127.9
Materials and components for manufacturing	126.1	124.5	123.4	123.2	123.8	124.1	124.6	125.0	125.4	125.9	125.9	126.1	126.5	126.8	127.4
Materials for food manufacturing	123.2	120.9	121.4	118.1	119.6	120.0	119.0	121.1	122.0	122.2	120.9	118.5	117.9	117.8	118.1
Materials for nondurable manufacturing	126.7	124.8	122.6	122.7	123.3	123.8	124.8	125.5	126.5	127.7	127.8	128.4	129.0	129.6	131.3
Materials for durable manufacturing	128.0	125.1	123.2	123.2	124.3	124.8	126.1	126.2	126.2	126.5	126.7	127.4	128.4	129.4	129.5
Components for manufacturing	125.9	125.7	125.7	125.7	125.6	125.7	125.6	125.6	125.7	125.7	125.7	125.7	125.8	125.7	125.7
Materials and components for construction	146.8	148.9	147.8	148.0	148.5	149.5	150.5	150.4	149.6	149.1	149.4	149.7	150.4	150.8	151.3
Processed fuels and lubricants	81.1	84.9	76.2	80.6	82.5	84.9	87.6	90.0	92.5	89.3	90.2	91.7	91.7	94.9	98.1
Containers	140.8	142.5	138.5	140.4	141.6	142.2	142.1	143.6	145.7	146.3	146.5	146.5	147.2	147.3	148.3
Supplies	134.8	134.2	133.7	133.8	133.7	133.9	133.9	134.2	134.4	134.8	135.0	135.2	135.2	135.5	136.0
Crude materials for further processing	96.8	98.2	89.0	91.1	97.4	97.4	97.9	103.1	107.3	104.0	109.2	103.9	106.3	111.2	113.3
Foodstuffs and feedstuffs	103.9	98.8	98.8	95.4	99.6	99.5	96.2	100.1	100.1	98.8	99.5	96.8	96.4	97.6	101.3
Crude nonfood materials	88.4	94.3	79.1	84.8	92.3	92.5	95.5	101.5	108.3	103.8	111.9	105.0	109.2	116.5	117.5
Special groupings:															
Finished goods, excluding foods	129.5	132.3	129.9	131.3	131.6	131.8	132.3	133.0	134.0	134.7	134.7	134.7	134.5	135.9	137.2
Finished energy goods	75.1	78.9	71.2	75.9	77.5	78.6	80.7	83.5	85.8	83.5	83.6	83.8	83.8	87.4	92.0
Finished goods less energy	141.1	143.0	142.7	142.3	142.5	142.6	142.3	142.5	143.1	144.2	144.0	144.0	143.6	144.2	144.3
Finished consumer goods less energy	142.5	145.2	144.7	144.2	144.6	144.8	144.5	144.9	145.8	146.6	146.3	146.5	145.8	146.6	146.7
Finished goods less food and energy	143.7	146.1	145.8	145.8	145.6	145.5	145.3	145.2	145.7	147.5	147.4	147.4	147.0	147.5	147.6
Finished consumer goods less food and energy	147.7	151.7	151.2	151.2	151.0	151.0	150.9	150.7	151.7	153.6	153.4	153.4	152.8	153.6	153.6
Consumer nondurable goods less food and energy	159.1	166.3	165.3	165.2	165.2	165.7	165.9	165.7	167.9	168.1	168.2	168.1	167.2	169.0	169.0
Intermediate materials less foods and feeds	123.4	123.9	121.2	122.3	122.9	123.7	124.7	125.4	126.0	125.7	126.0	126.5	126.9	127.7	128.8
Intermediate foods and feeds	116.2	111.1	111.0	109.0	109.8	110.2	109.1	110.9	111.8	112.4	111.6	110.0	109.5	110.3	110.8
Intermediate energy goods	80.8	84.6	76.0	80.3	82.2	84.6	87.2	89.6	92.1	89.0	89.9	91.4	91.4	94.5	97.8
Intermediate goods less energy	132.4	131.7	130.6	130.7	131.1	131.5	131.9	132.3	132.5	132.9	133.0	133.1	133.5	133.8	134.4
Intermediate materials less foods and energy	133.5	133.1	131.9	132.1	132.5	132.9	133.4	133.7	133.9	134.2	134.4	134.6	135.1	135.4	136.0
Crude energy materials	68.6	78.4	60.5	68.1	77.1	77.1	80.4	87.3	95.4	88.7	98.9	89.0	92.9	102.2	103.4
Crude materials less energy	113.6	108.0	106.6	103.9	107.6	107.7	105.8	109.4	110.0	109.8	110.5	109.3	110.4	111.4	114.1
Crude nonfood materials less energy	142.1	135.3	129.9	129.1	131.4	132.2	134.2	136.8	139.1	141.7	142.6	145.5	150.6	151.0	151.1

32. Producer Price Indexes for the net output of major industry groups

[December 1984 = 100, unless otherwise indicated]

SIC	Industry	Annual average		1999									2000		
		1998	1999[p]	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
–	**Total mining industries**	70.8	78.0	63.4	68.9	76.5	76.3	78.7	84.7	91.5	87.7	95.1	87.5	90.0	97.3	100.1
10	Metal mining	73.2	70.5	68.3	69.8	69.7	67.3	68.8	69.3	70.4	76.3	73.4	72.6	73.7	75.5	73.6
12	Coal mining (12/85 = 100)	89.5	87.2	89.3	89.9	87.8	88.2	86.9	86.9	85.9	86.0	86.1	85.1	85.9	84.6	85.8
13	Oil and gas extraction (12/85 = 100)	68.3	78.5	58.6	65.7	76.3	76.2	79.6	87.6	96.9	91.2	101.6	91.6	94.7	104.5	108.6
14	Mining and quarrying of nonmetallic minerals, except fuels	132.2	133.9	133.6	133.8	133.8	134.2	134.2	134.2	134.3	134.4	134.4	134.4	134.7	135.0	135.2
–	**Total manufacturing industries**	126.2	128.3	126.3	127.4	127.7	127.8	128.3	129.0	129.7	130.2	130.3	130.6	130.8	132.0	133.0
20	Food and kindred products	126.3	126.3	125.6	124.3	125.3	126.0	125.9	126.8	127.5	127.5	127.1	126.7	126.6	127.3	127.5
21	Tobacco manufactures	243.1	325.7	315.8	316.0	316.1	316.2	316.1	316.5	344.5	344.4	344.5	345.0	329.5	348.6	347.3
22	Textile mill products	118.6	116.3	117.0	116.4	116.4	116.3	115.9	116.0	115.9	116.1	115.9	116.1	116.0	116.3	116.0
23	Apparel and other finished products made from fabrics and similar materials	124.8	125.3	125.2	125.3	125.3	125.1	125.1	125.5	125.6	125.6	125.4	125.6	125.2	125.3	125.3
24	Lumber and wood products, except furniture	157.0	161.8	160.1	160.2	161.9	165.2	168.5	166.9	163.1	160.0	159.6	160.9	161.8	161.9	162.0
25	Furniture and fixtures	139.7	141.2	140.6	140.7	140.9	141.1	141.3	141.6	141.8	142.0	142.0	142.2	142.3	142.4	142.8
26	Paper and allied products	136.2	136.4	133.3	134.2	134.8	135.8	136.3	137.3	138.7	139.9	140.2	140.3	141.0	141.5	143.5
27	Printing, publishing, and allied industries	174.0	177.5	177.0	177.1	177.2	177.2	177.4	177.7	178.1	178.6	179.1	179.2	180.3	180.6	181.2
28	Chemicals and allied products	148.7	149.5	147.5	147.7	148.2	149.0	149.9	150.0	151.0	152.8	153.0	152.5	153.1	154.1	154.8
29	Petroleum refining and related products	66.3	76.8	59.9	73.7	75.4	74.2	79.6	85.3	90.2	87.0	89.5	92.8	94.2	103.7	112.2
30	Rubber and miscellaneous plastics products	122.1	122.2	121.3	121.7	121.6	121.9	122.1	122.5	122.8	122.9	123.3	123.3	123.9	123.7	124.0
31	Leather and leather products	137.1	136.5	136.1	136.1	136.0	136.5	136.7	136.7	136.9	137.0	137.0	137.3	137.3	137.5	137.5
32	Stone, clay, glass, and concrete products	129.3	132.6	131.7	132.1	132.5	132.7	132.7	133.1	133.2	133.6	133.7	133.6	134.2	134.5	134.7
33	Primary metal industries	120.9	115.7	114.8	114.7	114.9	115.0	115.4	115.7	116.4	117.1	117.1	117.2	118.1	119.1	119.8
34	Fabricated metal products, except machinery and transportation transportation equipment	128.7	129.1	128.7	128.9	128.9	129.1	129.1	129.1	129.2	129.4	129.6	129.6	129.8	130.1	130.4
35	Machinery, except electrical	117.7	117.3	117.4	117.5	117.5	117.5	117.3	117.2	117.1	117.1	117.1	117.2	117.2	117.3	117.4
36	Electrical and electronic machinery, equipment, and supplies	110.4	109.6	109.8	109.7	109.7	109.5	109.5	109.5	109.2	109.1	109.1	109.4	108.9	108.8	108.5
37	Transportation	133.6	134.4	134.4	134.5	134.1	133.6	133.0	132.9	132.6	136.7	136.2	136.0	136.1	135.9	136.1
38	Measuring and controlling instruments; photographic, medical, and optical goods; watches and clocks	126.0	125.7	126.4	126.4	125.9	125.3	125.1	125.0	124.9	125.2	125.3	125.4	125.7	126.0	125.9
39	Miscellaneous manufacturing industries (12/85 = 100)	129.7	130.3	130.4	130.4	130.5	130.5	130.5	130.1	130.0	130.4	130.2	130.6	130.9	131.0	130.9
	Service industries:															
42	Motor freight transportation and warehousing (06/93 = 100)	111.6	114.7	114.1	114.2	114.3	114.6	114.8	115.1	115.8	115.5	115.5	115.8	116.5	116.8	118.1
43	U.S. Postal Service (06/89 = 100)	132.3	135.3	135.4	135.4	135.4	135.2	135.2	135.2	135.2	135.2	135.2	135.2	135.2	135.2	135.2
44	Water transportation (12/92 = 100)	105.6	113.3	105.8	106.0	114.4	116.8	117.4	117.2	117.3	116.7	116.7	117.2	116.1	117.5	117.2
45	Transportation by air (12/92 = 100)	124.5	130.8	128.9	129.6	130.0	130.9	131.4	131.7	131.8	133.1	133.4	133.7	135.4	136.8	138.4
46	Pipelines, except natural gas (12/92 = 100)	99.2	98.4	98.2	98.4	98.5	98.6	98.2	98.2	98.3	98.3	98.2	98.4	102.1	101.9	101.9

33. Annual data: Producer Price Indexes, by stage of processing

[1982 = 100]

Index	1991	1992	1993	1994	1995	1996	1997	1998	1999[p]
Finished goods									
Total	121.7	123.2	124.7	125.5	127.9	131.3	131.8	130.7	133.1
Foods	124.1	123.3	125.7	126.8	129.0	133.6	134.5	134.3	135.1
Energy	78.1	77.8	78.0	77.0	78.1	83.2	83.4	75.1	78.9
Other	131.1	134.2	135.8	137.1	140.0	142.0	142.4	143.7	146.1
Intermediate materials, supplies, and components									
Total	114.4	114.7	116.2	118.5	124.9	125.7	125.6	123.0	123.2
Foods	115.3	113.9	115.6	118.5	119.5	125.3	123.2	123.2	120.9
Energy	85.1	84.3	84.6	83.0	84.1	89.8	89.0	80.8	84.6
Other	121.4	122.0	123.8	127.1	135.2	134.0	134.2	133.5	133.1
Crude materials for further processing									
Total	101.2	100.4	102.4	101.8	102.7	113.8	111.1	96.8	98.2
Foods	105.5	105.1	108.4	106.5	105.8	121.5	112.2	103.9	98.8
Energy	80.4	78.8	76.7	72.1	69.4	85.0	87.3	68.6	78.4
Other	97.5	94.2	94.1	97.0	105.8	105.7	103.5	84.5	91.1

34. U.S. export price indexes by Standard International Trade Classification

[1995 = 100, unless otherwise indicated]

SITC Rev. 3	Industry	1999										2000		
		Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
0	**Food and live animals**	87.8	88.2	89.2	89.2	87.4	87.6	86.6	86.4	86.3	85.6	86.3	86.8	86.9
01	Meat and meat preparations	90.0	88.9	89.9	91.5	94.2	97.3	97.5	97.4	97.7	100.9	100.1	97.7	97.5
04	Cereals and cereal preparations	75.8	76.7	76.2	75.9	70.9	73.3	72.7	69.5	70.1	68.5	71.0	74.1	74.4
05	Vegetables, fruit, and nuts, prepared fresh or dry	94.9	94.8	97.6	98.5	99.8	97.8	94.3	96.6	94.3	91.2	90.9	89.0	88.6
2	**Crude materials, inedible, except fuels**	74.0	74.1	74.6	74.9	74.7	76.5	77.7	78.1	77.8	78.9	80.0	82.2	83.2
21	Hides, skins, and furskins, raw	81.5	78.9	79.0	79.0	80.3	83.4	86.5	88.6	87.8	90.5	91.1	89.5	87.7
22	Oilseeds and oleaginous fruits	78.3	80.4	79.5	79.2	72.8	80.1	85.0	82.3	78.1	79.6	80.5	84.8	86.0
24	Cork and wood	81.5	81.8	81.7	82.0	82.9	83.0	82.8	83.5	83.8	85.0	86.4	86.5	87.2
25	Pulp and waste paper	62.0	61.9	62.9	66.0	71.5	73.5	75.2	77.1	78.7	80.9	84.3	88.3	90.0
26	Textile fibers and their waste	69.7	69.8	70.1	68.6	65.2	65.1	64.4	64.5	63.4	62.5	61.2	65.7	68.7
27	Crude fertilizers and crude minerals	93.6	93.5	93.5	93.5	93.6	93.0	93.3	93.1	93.8	94.1	94.3	94.0	93.5
28	Metalliferous ores and metal scrap	69.8	68.6	70.6	70.7	72.3	73.0	73.5	75.1	77.3	78.4	80.0	80.7	80.8
3	**Mineral fuels, lubricants, and related products**	93.1	99.6	100.7	102.0	109.0	113.8	115.3	119.5	121.4	126.6	129.4	138.5	152.2
32	Coal, coke, and briquettes	99.3	98.3	98.4	98.3	98.2	98.3	97.6	97.6	97.6	97.5	96.1	96.1	96.1
33	Petroleum, petroleum products, and related materials	90.9	103.3	105.3	107.6	119.8	126.4	128.6	131.3	133.4	140.1	143.5	159.6	179.5
4	**Animal and vegetable oils, fats, and waxes**	82.6	82.8	81.9	76.6	76.8	77.1	78.8	81.9	79.0	78.0	75.8	74.3	69.4
5	**Chemicals and related products, n.e.s.**	90.5	90.4	90.7	91.2	91.6	91.8	92.3	93.3	93.3	93.6	93.8	94.0	94.3
54	Medicinal and pharmaceutical products	100.4	100.6	100.6	100.6	100.3	99.9	99.8	99.8	99.8	100.3	100.2	100.3	100.3
55	Essential oils; polishing and cleaning preparations	101.5	101.4	101.8	101.9	101.9	101.8	102.1	102.3	103.5	103.4	103.4	103.3	103.0
57	Plastics in primary forms (12/92 = 100)	84.4	85.5	86.6	88.4	89.7	90.6	92.1	94.4	94.9	95.0	94.8	94.6	95.3
58	Plastics in nonprimary forms (12/92 = 100)	96.4	96.1	96.3	97.2	97.4	97.4	97.6	97.9	97.8	98.0	97.8	98.7	100.3
59	Chemical materials and products, n.e.s.	100.4	99.9	99.5	99.6	99.4	99.3	99.2	98.9	98.8	99.1	99.2	99.2	99.0
6	**Manufactured goods classified chiefly by materials**	96.4	96.5	96.6	96.8	97.1	97.3	97.5	97.8	98.0	98.3	98.3	99.0	99.6
62	Rubber manufactures, n.e.s.	106.8	105.9	105.9	105.5	105.6	105.8	106.9	108.2	108.2	108.5	104.7	103.7	103.6
64	Paper, paperboard, and articles of paper, pulp, and paperboard	80.9	81.9	82.9	83.4	84.4	85.4	86.3	87.2	87.6	87.2	87.6	87.8	88.3
66	Nonmetallic mineral manufactures, n.e.s.	106.5	106.6	106.3	106.3	106.3	106.3	106.1	106.0	106.0	105.8	105.8	106.0	106.3
68	Nonferrous metals	84.0	84.3	84.7	85.0	85.3	87.0	88.0	90.2	90.7	92.3	93.4	98.8	101.9
7	**Machinery and transport equipment**	97.9	98.0	97.8	97.6	97.3	97.3	97.2	97.4	97.5	97.2	97.4	97.4	97.5
71	Power generating machinery and equipment	109.4	109.6	109.5	109.6	110.1	110.1	110.1	110.2	111.0	111.0	111.8	111.8	111.8
72	Machinery specialized for particular industries	105.7	105.9	105.9	106.1	105.8	105.8	105.9	106.0	106.1	104.7	106.2	106.3	106.2
74	General industrial machines and parts, n.e.s., and machine parts	107.2	107.3	107.2	107.3	107.5	107.5	107.6	107.7	107.7	107.9	107.5	107.6	108.0
75	Computer equipment and office machines	73.0	72.7	72.2	71.6	71.0	71.0	70.2	70.5	70.4	70.2	70.1	69.8	69.8
76	Telecommunications and sound recording and reproducing apparatus and equipment	97.5	97.3	97.1	96.9	97.0	96.9	96.9	96.6	96.6	96.7	96.4	96.7	96.6
77	Electrical machinery and equipment	89.3	89.6	89.0	88.6	87.7	87.5	87.6	87.4	87.3	86.7	86.3	86.5	86.3
78	Road vehicles	102.2	102.2	102.3	102.5	102.4	102.3	102.4	103.1	103.1	103.1	103.5	103.6	104.0
87	**Professional, scientific, and controlling instruments and apparatus**	105.0	105.2	105.4	105.2	105.4	105.4	105.4	105.5	105.6	105.3	105.2	105.4	105.7

35. U.S. import price indexes by Standard International Trade Classification

[1995 = 100, unless otherwise indicated]

SITC Rev. 3	Industry	1999										2000		
		Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
0	**Food and live animals**	93.2	94.5	94.9	93.3	92.6	92.0	91.5	91.0	92.4	94.7	93.7	93.5	93.4
01	Meat and meat preparations	94.0	94.5	93.7	94.5	94.3	96.7	99.4	98.4	97.7	98.4	97.8	98.2	99.1
03	Fish and crustaceans, mollusks, and other aquatic invertebrates	103.3	106.0	106.0	104.3	104.2	103.8	103.1	105.0	107.5	106.8	106.8	107.9	109.2
05	Vegetables, fruit, and nuts, prepared fresh or dry	101.7	104.9	108.1	103.2	103.5	102.6	101.6	96.5	97.2	103.6	102.0	102.1	102.3
07	Coffee, tea, cocoa, spices, and manufactures thereof	71.0	69.5	68.4	69.4	64.3	63.2	61.4	62.0	66.0	70.6	67.2	64.7	60.9
1	**Beverages and tobacco**	110.4	110.6	110.4	110.4	110.6	111.2	112.2	111.5	111.5	112.0	111.2	113.1	115.9
11	Beverages	106.9	107.2	107.2	107.2	107.6	107.7	109.1	108.5	108.5	108.7	107.9	110.1	113.4
2	**Crude materials, inedible, except fuels**	86.3	86.1	88.5	90.3	93.1	92.7	91.7	90.8	90.3	92.2	93.6	95.0	93.4
24	Cork and wood	113.2	113.6	118.3	122.3	131.9	128.9	121.7	116.7	114.9	118.7	117.7	117.0	116.0
25	Pulp and waste paper	57.6	57.3	58.1	60.6	61.4	61.1	66.0	63.9	66.8	68.2	70.5	72.0	72.4
28	Metalliferous ores and metal scrap	89.9	89.5	90.9	91.9	91.9	93.8	94.3	98.4	98.0	99.0	101.4	105.7	103.2
29	Crude animal and vegetable materials, n.e.s.	109.4	108.6	107.8	101.7	102.8	105.0	111.1	112.1	106.5	111.9	121.1	127.6	112.0
3	**Mineral fuels, lubricants, and related products**	73.2	86.3	93.1	92.7	105.3	117.1	126.5	128.0	134.7	141.2	145.4	165.5	166.9
33	Petroleum, petroleum products, and related materials	70.2	84.9	91.1	91.3	103.8	115.9	125.7	127.4	132.6	141.4	146.3	167.6	167.9
34	Gas, natural and manufactured	97.4	99.3	112.1	106.5	123.1	134.1	142.2	141.1	161.5	150.2	147.8	162.1	173.2
5	**Chemicals and related products, n.e.s.**	90.8	90.6	90.6	90.6	90.6	90.4	91.3	91.8	92.1	92.0	92.2	92.7	92.8
52	Inorganic chemicals	88.6	86.9	86.8	86.7	86.4	86.2	86.6	87.2	87.7	88.0	88.3	89.0	88.9
53	Dying, tanning, and coloring materials	94.3	92.6	91.7	91.9	90.6	90.5	90.2	90.6	91.4	89.7	88.9	89.3	88.2
54	Medicinal and pharmaceutical products	96.7	96.1	95.6	96.2	96.2	96.3	97.0	97.4	97.8	97.3	98.2	98.3	97.5
55	Essential oils; polishing and cleaning preparations	93.5	93.1	92.7	92.4	91.7	91.8	92.3	91.8	92.3	90.2	89.6	89.6	89.0
57	Plastics in primary forms (12/92 = 100)	92.0	92.5	93.4	93.6	93.7	93.1	93.8	93.8	93.9	94.0	93.7	93.0	94.5
58	Plastics in nonprimary forms (12/92 = 100)	73.1	73.5	74.0	75.6	75.8	76.1	77.9	78.9	79.4	79.7	79.3	79.1	80.4
59	Chemical materials and products, n.e.s.	97.9	98.5	98.0	97.4	98.0	98.1	98.1	98.6	98.4	99.5	99.9	101.6	100.6
6	**Manufactured goods classified chiefly by materials**	91.8	91.7	91.8	92.0	91.9	92.4	92.6	93.3	93.9	93.9	94.5	95.5	97.7
62	Rubber manufactures, n.e.s.	94.5	94.2	94.7	94.3	94.4	94.5	95.0	94.9	94.4	94.4	92.6	92.5	92.0
64	Paper, paperboard, and articles of paper, pulp, and paperboard	85.8	85.1	85.2	83.7	83.6	83.5	83.7	84.4	87.4	86.2	86.3	86.6	86.7
66	Nonmetallic mineral manufactures, n.e.s.	101.3	100.9	100.8	100.9	100.8	100.9	101.1	101.2	101.6	101.2	100.9	101.3	100.8
68	Nonferrous metals	85.9	85.7	85.8	87.7	87.6	89.9	91.1	94.8	95.4	95.6	98.9	104.4	114.9
69	Manufactures of metals, n.e.s.	95.9	95.9	96.4	96.1	95.8	95.6	95.8	95.6	95.9	95.9	95.7	96.1	96.2
7	**Machinery and transport equipment**	90.9	90.6	90.6	90.3	89.9	89.9	89.9	89.9	89.8	89.7	89.8	89.7	89.6
72	Machinery specialized for particular industries	98.3	98.1	97.8	97.6	97.3	97.2	97.6	97.8	98.2	97.8	97.7	98.1	97.5
74	General industrial machines and parts, n.e.s., and machine parts	98.4	97.9	97.7	97.6	97.3	97.3	97.4	97.3	97.3	97.0	97.1	96.7	97.0
75	Computer equipment and office machines	64.4	63.7	63.6	63.1	62.0	61.8	61.6	61.4	61.4	61.7	61.6	61.4	61.0
76	Telecommunications and sound recording and reproducing apparatus and equipment	88.4	87.9	87.8	87.6	87.3	87.0	87.1	86.0	85.9	85.6	85.2	85.0	84.9
77	Electrical machinery and equipment	83.8	83.5	83.3	82.7	81.9	82.1	82.5	82.6	82.2	82.1	82.4	82.1	82.0
78	Road vehicles	101.9	102.0	102.3	102.3	102.4	102.4	102.2	102.4	102.4	102.3	102.4	102.6	102.6
85	Footwear	101.1	101.2	100.5	100.7	100.7	100.6	100.8	100.8	100.8	100.8	100.8	100.9	100.7
88	Photographic apparatus, equipment, and supplies, and optical goods, n.e.s.	91.8	91.4	91.4	91.3	91.2	91.1	91.4	92.2	92.5	92.5	92.2	91.7	91.8

– Data not available.

36. U.S. export price indexes by end-use category

[1995 = 100]

Category	1999										2000		
	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
ALL COMMODITIES	94.2	94.4	94.5	94.5	94.4	94.7	94.8	95.1	95.3	95.2	95.4	95.9	96.3
Foods, feeds, and beverages	87.3	88.2	89.0	88.9	86.7	87.9	87.6	87.4	86.7	86.0	86.3	87.1	87.1
Agricultural foods, feeds, and beverages	85.9	86.4	86.8	86.8	85.0	86.9	86.7	86.4	85.6	84.9	85.4	86.0	85.9
Nonagricultural (fish, beverages) food products	103.5	108.5	114.2	113.1	106.8	99.5	98.2	99.7	99.2	99.5	98.4	101.3	101.6
Industrial supplies and materials	86.5	86.8	87.2	87.5	88.3	89.0	89.5	90.4	91.1	91.7	92.1	93.5	95.1
Agricultural industrial supplies and materials	79.9	79.6	79.5	78.4	76.2	76.3	76.6	77.5	76.6	76.7	75.2	76.9	77.7
Fuels and lubricants	92.4	97.8	98.4	99.8	106.1	110.5	111.8	114.4	115.9	120.4	122.6	131.4	143.8
Nonagricultural supplies and materials, excluding fuel and building materials	85.5	85.3	85.7	86.0	86.6	87.0	87.5	88.3	89.1	89.3	89.6	90.3	91.0
Selected building materials	87.3	87.5	87.5	87.8	88.0	88.4	87.4	87.8	87.7	88.6	89.2	89.5	90.0
Capital goods	96.9	97.0	96.7	96.5	96.2	96.2	96.1	96.2	96.3	96.0	96.1	96.2	96.2
Electric and electrical generating equipment	99.1	99.1	98.9	99.0	98.2	98.0	98.3	98.3	98.4	98.5	98.2	98.7	98.5
Nonelectrical machinery	93.4	93.5	93.2	92.9	92.6	92.6	92.4	92.4	92.5	92.1	92.1	92.1	92.1
Automotive vehicles, parts, and engines	103.0	102.9	103.0	103.2	103.2	103.2	103.3	104.0	103.9	103.8	103.9	103.9	104.3
Consumer goods, excluding automotive	101.8	101.8	101.8	102.0	101.9	102.0	101.9	102.2	102.2	102.4	102.5	102.5	102.5
Nondurables, manufactured	102.1	102.0	102.0	102.1	102.0	102.0	102.1	102.4	102.5	102.9	102.8	102.6	102.7
Durables, manufactured	100.3	100.4	100.3	100.5	100.6	100.8	100.7	100.8	100.9	100.8	101.0	101.3	101.0
Agricultural commodities	84.5	84.9	85.2	85.0	83.1	84.7	84.6	84.5	83.7	83.1	83.2	84.0	84.1
Nonagricultural commodities	95.3	95.5	95.5	95.6	95.7	95.8	95.9	96.3	96.6	96.6	96.8	97.3	97.7

37. U.S. import price indexes by end-use category

[1995 = 100]

Category	1999										2000		
	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
ALL COMMODITIES	90.9	91.9	92.5	92.4	93.3	94.3	95.2	95.4	96.2	96.8	97.2	99.1	99.4
Foods, feeds, and beverages	93.0	94.0	94.8	93.7	92.8	92.5	92.3	91.6	93.0	94.8	93.6	93.5	93.5
Agricultural foods, feeds, and beverages	88.7	89.1	90.3	89.3	88.0	87.7	87.6	86.1	87.2	89.8	88.4	87.6	86.7
Nonagricultural (fish, beverages) food products	104.4	106.5	106.5	105.2	105.4	105.0	104.9	106.3	108.2	107.7	107.2	108.9	111.3
Industrial supplies and materials	84.8	89.0	91.5	91.8	96.1	99.9	103.1	104.3	106.9	109.4	111.1	118.5	120.0
Fuels and lubricants	73.9	86.7	93.4	93.2	105.4	116.7	126.0	128.1	134.3	140.7	144.4	164.5	165.2
Petroleum and petroleum products	70.3	84.6	90.8	91.2	103.5	115.6	125.2	127.3	132.5	140.9	146.1	167.2	167.5
Paper and paper base stocks	78.4	77.5	77.7	77.0	77.0	76.9	78.4	78.5	81.8	81.2	81.9	82.5	82.8
Materials associated with nondurable supplies and materials	87.5	87.4	87.3	87.4	87.0	86.9	87.7	88.3	88.8	89.1	89.2	89.6	90.0
Selected building materials	107.9	108.3	110.5	114.2	120.6	118.9	113.4	110.0	108.3	111.1	110.6	110.1	110.6
Unfinished metals associated with durable goods	86.9	86.7	87.3	88.3	87.7	89.0	89.7	93.0	94.4	94.8	97.4	100.3	107.0
Nonmetals associated with durable goods	88.2	87.3	87.3	87.0	86.7	86.7	87.3	87.5	87.5	87.4	87.2	88.0	87.5
Capital goods	83.7	83.3	83.0	82.6	81.9	81.9	82.0	81.9	81.8	81.7	81.7	81.5	81.2
Electric and electrical generating equipment	92.8	92.5	92.3	91.5	91.1	91.2	91.6	91.7	91.8	91.1	92.0	91.9	92.1
Nonelectrical machinery	80.7	80.2	79.9	79.5	78.7	78.7	78.8	78.6	78.5	78.4	78.3	78.2	77.8
Automotive vehicles, parts, and engines	101.4	101.5	101.8	101.7	101.8	101.9	101.9	102.0	102.0	102.0	102.1	102.2	102.2
Consumer goods, excluding automotive	98.0	97.7	97.6	97.5	97.4	97.4	97.7	97.5	97.6	97.5	97.5	97.5	97.1
Nondurables, manufactured	101.0	100.8	100.5	100.4	100.2	100.3	100.8	100.5	100.7	100.6	100.4	100.5	100.2
Durables, manufactured	94.8	94.4	94.5	94.4	94.3	94.1	94.2	94.1	94.2	94.1	94.0	93.9	93.6
Nonmanufactured consumer goods	99.0	98.9	98.8	98.0	98.3	99.1	99.9	100.0	98.8	99.8	101.5	102.5	100.1

38. U.S. international price indexes for selected categories of services

[1990 = 100, unless otherwise indicated]

Category	1998			1999				2000
	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	Mar.
Air freight (inbound) (9/90 = 100)	83.4	81.8	87.4	88.0	86.2	87.9	90.7	88.9
Air freight (outbound) (9/92 = 100)	96.0	95.8	95.2	92.7	92.8	92.7	91.7	91.7
Air passenger fares (U.S. carriers)	107.8	107.3	103.1	104.5	112.3	114.2	106.8	107.3
Air passenger fares (foreign carriers)	102.4	104.0	101.1	98.9	106.3	108.6	102.2	102.6
Ocean liner freight (inbound)	103.2	105.0	104.2	102.6	133.7	148.0	139.4	136.3

39. Indexes of productivity, hourly compensation, and unit costs, quarterly data seasonally adjusted

[1992 = 100]

Item	Quarterly indexes												
	1996	1997				1998				1999			
	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
Business													
Output per hour of all persons	105.9	106.3	107.1	108.1	108.4	109.7	109.8	110.7	111.9	112.7	113.0	114.3	116.0
Compensation per hour	111.6	112.5	113.2	114.6	116.4	117.8	119.4	121.2	122.7	124.2	125.7	127.1	128.2
Real compensation per hour	99.8	100.1	100.4	101.2	102.4	103.4	104.4	105.6	106.5	107.3	107.8	108.3	108.5
Unit labor costs	105.3	105.9	105.7	106.0	107.4	107.5	108.8	109.5	109.6	110.2	111.3	111.3	110.5
Unit nonlabor payments	113.9	114.5	115.9	116.0	114.1	114.2	112.6	112.1	112.1	112.1	110.9	111.5	114.1
Implicit price deflator	108.5	109.1	109.5	109.7	109.9	110.0	110.2	110.4	110.5	110.9	111.2	111.4	111.8
Nonfarm business													
Output per hour of all persons	105.8	106.1	106.9	107.8	108.1	109.3	109.5	110.4	111.5	112.2	112.4	113.8	115.5
Compensation per hour	111.2	112.2	112.9	114.1	115.9	117.2	118.8	120.6	122.0	123.3	124.7	126.1	127.3
Real compensation per hour	99.5	99.8	100.1	100.8	101.9	102.9	103.9	105.1	105.9	106.6	106.9	107.5	107.7
Unit labor costs	105.0	105.7	105.6	105.8	107.2	107.3	108.5	109.3	109.4	109.8	111.0	110.9	110.2
Unit nonlabor payments	114.4	115.0	116.6	117.0	115.3	115.8	114.1	113.1	112.7	113.1	112.2	112.9	115.6
Implicit price deflator	108.4	109.1	109.6	109.9	110.1	110.4	110.5	110.7	110.6	111.0	111.4	111.6	112.1
Nonfinancial corporations													
Output per hour of all employees	109.6	110.1	110.7	112.4	113.2	114.2	115.3	117.0	117.9	119.1	120.1	121.3	–
Compensation per hour	110.3	111.2	112.0	113.3	115.1	116.4	118.0	119.8	121.3	122.7	124.2	125.5	–
Real compensation per hour	98.7	98.9	99.3	100.0	101.2	102.2	103.2	104.4	105.3	106.1	106.5	107.0	–
Total unit costs	100.4	100.7	100.8	100.3	100.8	100.8	101.2	101.2	101.8	101.7	102.1	102.4	–
Unit labor costs	100.6	101.0	101.1	100.7	101.6	101.9	102.3	102.4	102.9	103.0	103.4	103.5	–
Unit nonlabor costs	99.9	99.8	99.9	99.2	98.6	98.0	98.2	98.0	99.2	98.3	98.7	99.6	–
Unit profits	153.9	155.6	156.2	161.1	155.3	153.7	150.1	152.6	145.3	149.4	148.4	144.7	–
Unit nonlabor payments	113.0	113.4	113.6	114.3	112.4	111.5	110.8	111.3	110.4	110.8	110.8	110.6	–
Implicit price deflator	104.8	105.3	105.4	105.4	105.3	105.2	105.2	105.5	105.5	105.7	105.9	105.9	–
Manufacturing													
Output per hour of all persons	115.7	116.9	118.4	120.9	122.0	122.7	123.9	126.3	128.2	130.4	132.2	133.6	136.9
Compensation per hour	110.3	111.8	112.6	113.6	115.5	117.0	118.6	120.6	121.4	122.8	124.5	126.3	127.6
Real compensation per hour	98.7	99.5	99.9	100.3	101.5	102.7	103.7	105.1	105.4	106.1	106.8	107.7	108.0
Unit labor costs	95.4	95.7	95.1	94.0	94.6	95.3	95.7	95.5	94.7	94.1	94.2	94.5	93.2

– Data not available.

40. Annual indexes of multifactor productivity and related measures, selected years

[1992 = 100]

Item	1960	1970	1980	1989	1990	1991	1993	1994	1995	1996	1997
Private business											
Productivity:											
Output per hour of all persons	50.8	70.1	83.8	95.5	96.1	96.7	100.1	100.6	101.0	103.7	105.2
Output per unit of capital services	117.3	117.1	107.3	103.8	102.1	98.6	100.7	102.3	101.9	102.3	102.6
Multifactor productivity	70.7	86.5	95.3	100.0	99.6	98.1	100.1	100.6	100.7	102.4	103.1
Output	34.0	51.6	72.6	97.8	98.6	96.9	102.7	107.0	110.0	114.7	120.1
Inputs:											
Labor input	66.9	73.7	86.6	102.4	102.6	100.2	102.7	106.4	108.9	110.6	114.1
Capital services	29.0	44.1	67.7	94.2	96.5	98.3	102.0	104.6	108.0	112.2	117.1
Combined units of labor and capital input	48.1	59.7	76.2	97.8	99.0	98.7	102.6	106.3	109.3	112.1	116.5
Capital per hour of all persons	43.3	59.9	78.1	92.0	94.1	98.1	99.4	98.3	99.2	101.4	102.6
Private nonfarm business											
Productivity:											
Output per hour of all persons	54.3	72.2	85.6	95.9	96.3	96.9	100.1	100.6	101.2	103.7	104.9
Output per unit of capital services	126.1	124.1	111.4	104.6	102.6	98.8	100.8	102.1	101.8	102.1	102.1
Multifactor productivity	74.9	89.4	97.6	100.5	99.8	98.4	100.1	100.5	100.8	102.3	102.7
Output	33.7	51.8	73.1	98.1	98.8	97.0	103.0	107.1	110.4	115.0	120.2
Inputs:											
Labor input	62.1	71.7	85.4	102.4	102.6	100.1	102.9	106.5	109.0	110.9	114.6
Capital services	26.7	41.8	65.6	93.9	96.3	98.2	102.2	104.8	108.4	112.6	117.7
Combined units of labor and capital input	45.0	58.0	74.9	97.7	99.0	98.6	102.9	106.5	109.5	112.4	117.0
Capital per hour of all persons	43.0	58.2	76.8	91.7	93.8	98.1	99.3	98.5	99.4	101.6	102.8
Manufacturing											
Productivity:											
Output per hour of all persons	42.1	54.5	70.4	90.7	93.0	95.1	102.2	105.3	109.4	113.8	–
Output per unit of capital services	125.6	116.3	101.5	103.5	101.3	97.3	101.8	105.2	106.8	107.0	–
Multifactor productivity	72.9	84.2	87.3	100.4	99.8	98.6	101.2	104.4	108.4	110.7	–
Output	38.7	56.8	75.7	97.1	97.5	95.5	103.6	109.1	113.8	118.0	–
Inputs:											
Hours of all persons	92.0	104.2	107.5	107.1	104.8	100.4	101.4	103.6	104.0	103.7	–
Capital services	30.9	48.8	74.6	93.8	96.3	98.2	101.7	103.6	106.6	110.3	–
Energy	51.5	85.4	92.5	96.8	99.9	100.1	103.7	107.3	109.5	107.0	–
Nonenergy materials	39.1	46.0	74.5	88.3	91.3	93.1	103.0	104.4	101.4	105.4	–
Purchased business services	27.3	47.4	71.9	88.9	91.8	91.9	104.3	107.8	111.0	111.6	–
Combined units of all factor inputs	53.1	67.4	86.7	96.7	97.7	96.9	102.3	104.5	105.0	106.6	–

– Data not available.

41. Annual indexes of productivity, hourly compensation, unit costs, and prices, selected years

[1992 = 100]

Item	1960	1970	1980	1989	1990	1991	1993	1994	1995	1996	1997	1998	1999
Business													
Output per hour of all persons	48.0	66.2	79.8	93.3	94.5	95.9	100.1	101.4	102.2	105.2	107.5	110.5	114.0
Compensation per hour	13.6	23.5	54.3	85.7	90.6	94.9	102.4	104.5	106.7	110.1	114.2	120.3	126.3
Real compensation per hour	59.9	79.0	89.7	95.8	96.4	97.4	99.9	99.7	99.1	99.6	101.1	105.1	108.1
Unit labor costs	28.4	35.6	68.1	91.9	95.9	99.0	102.3	103.0	104.4	104.7	106.2	108.8	110.8
Unit nonlabor payments	25.5	32.0	62.1	92.5	94.6	97.4	102.9	106.9	109.8	113.5	115.1	112.7	112.2
Implicit price deflator	27.3	34.3	65.9	92.1	95.4	98.4	102.5	104.4	106.4	107.9	109.5	110.3	111.3
Nonfarm business													
Output per hour of all persons	51.2	68.0	81.3	93.5	94.6	96.1	100.1	101.4	102.4	105.2	107.2	110.2	113.5
Compensation per hour	14.3	23.7	54.7	85.8	90.5	94.9	102.1	104.3	106.5	109.8	113.8	119.7	125.4
Real compensation per hour	62.8	79.7	90.3	95.8	96.3	97.4	99.6	99.5	98.9	99.3	100.7	104.5	107.2
Unit labor costs	27.9	34.9	67.2	91.7	95.7	98.8	102.1	102.9	104.0	104.4	106.1	108.6	110.5
Unit nonlabor payments	24.9	31.7	61.1	91.9	94.2	97.5	103.4	107.4	110.8	113.8	115.9	113.9	113.4
Implicit price deflator	26.8	33.7	65.0	91.8	95.1	98.3	102.6	104.5	106.5	107.8	109.7	110.5	111.5
Nonfinancial corporations													
Output per hour of all employees	52.6	66.3	76.9	93.8	94.9	96.9	101.5	104.3	105.6	108.4	111.7	116.2	–
Compensation per hour	15.6	25.3	56.6	87.0	91.4	95.5	102.1	104.3	106.2	109.0	113.0	119.0	–
Real compensation per hour	68.6	85.1	93.6	97.2	97.2	98.0	99.5	99.5	98.6	98.6	100.0	103.9	–
Total unit costs	28.9	37.4	72.5	93.6	97.1	99.8	100.3	100.0	100.6	100.4	100.6	101.3	–
Unit labor costs	29.7	38.2	73.7	92.7	96.4	98.6	100.6	100.0	100.5	100.5	101.1	102.4	–
Unit nonlabor costs	26.8	35.4	69.4	95.9	99.0	102.9	99.6	100.2	100.9	100.1	99.4	98.4	–
Unit profits	53.2	47.1	72.6	99.0	95.5	94.0	112.5	130.5	137.5	151.5	157.1	150.4	–
Unit nonlabor payments	33.2	38.3	70.2	96.6	98.1	100.7	102.7	107.6	109.8	112.6	113.4	111.0	–
Implicit price deflator	30.9	38.2	72.5	94.1	97.0	99.3	101.3	102.6	103.7	104.7	105.3	105.3	–
Manufacturing													
Output per hour of all persons	42.1	54.4	70.4	90.7	93.0	95.1	102.2	105.3	109.4	113.8	119.6	125.3	133.3
Compensation per hour	14.9	23.7	55.6	86.6	90.8	95.6	102.7	105.6	107.9	109.3	113.4	119.4	125.3
Real compensation per hour	65.4	79.7	91.8	96.8	96.6	98.0	100.2	100.8	100.2	98.9	100.4	104.3	107.2
Unit labor costs	35.3	43.6	78.9	95.5	97.6	100.4	100.5	100.3	98.6	96.0	94.8	95.3	94.0
Unit nonlabor payments	26.7	29.4	79.9	95.2	99.6	98.9	101.1	102.9	107.2	110.2	–	–	–
Implicit price deflator	30.1	34.9	79.5	95.3	98.8	99.5	100.9	101.9	103.9	104.7	–	–	–

– Data not available.

42. Annual indexes of output per hour for selected 3-digit SIC industries

[1987 = 100]

Industry	SIC	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Mining											
Copper ores	102	109.2	106.6	102.7	100.5	115.2	118.1	126.0	117.2	116.5	118.9
Gold and silver ores	104	101.5	113.3	122.3	127.4	141.6	159.8	160.8	144.2	138.3	158.0
Bituminous coal and lignite mining	122	111.7	117.3	118.7	122.4	133.0	141.2	148.1	155.9	168.0	176.8
Crude petroleum and natural gas	131	101.0	98.0	97.0	97.9	102.1	105.9	112.4	119.4	123.7	126.1
Crushed and broken stone	142	101.3	98.7	102.2	99.8	105.0	103.6	108.7	105.4	107.2	114.8
Manufacturing											
Meat products	201	100.1	99.3	97.1	99.7	104.6	104.3	101.2	102.4	97.7	–
Dairy products	202	108.4	107.8	107.3	108.4	111.5	109.7	111.9	116.6	115.9	–
Preserved fruits and vegetables	203	97.0	97.8	95.6	99.2	100.6	106.8	107.6	109.1	109.4	–
Grain mill products	204	101.3	107.6	105.3	104.9	107.7	109.1	108.4	115.3	107.7	–
Bakery products	205	96.8	96.1	92.7	90.6	93.8	94.4	96.4	97.3	95.4	–
Sugar and confectionery products	206	99.4	101.5	102.8	101.3	99.1	103.9	105.4	107.5	112.7	–
Fats and oils	207	108.9	116.4	118.1	120.1	114.1	112.6	111.8	120.3	111.1	–
Beverages	208	106.0	112.7	117.7	120.5	127.6	127.0	130.9	134.3	135.7	–
Miscellaneous food and kindred products	209	107.0	99.3	99.3	101.6	101.6	105.3	101.0	103.1	107.6	–
Cigarettes	211	101.2	109.0	113.2	107.6	111.6	106.5	126.6	142.9	147.7	–
Broadwoven fabric mills, cotton	221	99.6	99.8	103.1	111.2	110.3	117.8	122.1	134.0	137.8	–
Broadwoven fabric mills, manmade	222	99.2	106.3	111.3	116.2	126.2	131.7	142.5	145.2	151.1	–
Narrow fabric mills	224	108.4	92.7	96.5	99.6	112.9	111.4	120.1	118.9	127.5	–
Knitting mills	225	96.3	108.0	107.5	114.1	119.5	128.1	134.3	138.6	150.8	–
Textile finishing, except wool	226	90.3	88.7	83.4	79.9	78.6	79.3	81.2	78.5	79.8	–
Carpets and rugs	227	98.6	97.8	93.2	89.2	96.1	97.1	93.3	95.8	101.2	–
Yarn and thread mills	228	102.1	104.2	110.2	111.4	119.6	126.6	130.7	137.4	146.6	–
Miscellaneous textile goods	229	101.6	109.1	109.2	104.6	106.5	110.4	118.5	123.7	125.4	–
Men's and boys' suits and coats	231	105.1	97.7	93.9	90.2	89.0	97.4	97.7	92.5	96.5	–
Men's and boys' furnishings	232	100.1	100.1	102.1	108.4	109.1	108.4	111.7	123.4	134.0	–
Women's and misses' outerwear	233	101.4	96.8	104.1	104.3	109.4	121.8	127.4	135.5	144.2	–
Women's and children's undergarments	234	105.4	94.6	102.1	113.6	117.4	124.5	138.0	161.3	171.6	–
Hats, caps, and millinery	235	99.0	96.4	89.2	91.1	93.6	87.2	77.7	84.3	80.9	–
Miscellaneous apparel and accessories	238	101.3	88.4	90.6	91.8	91.3	94.0	105.5	116.8	121.3	–
Miscellaneous fabricated textile products	239	96.6	95.7	99.9	100.7	107.5	108.5	107.8	109.2	106.3	–
Logging	241	93.7	89.4	86.3	86.0	96.2	88.6	87.8	86.0	86.0	–
Sawmills and planing mills	242	100.7	99.6	99.8	102.6	108.1	101.9	103.3	110.2	114.9	–
Millwork, plywood, and structural members	243	98.9	97.1	98.0	98.0	99.9	97.0	94.5	92.7	92.2	–
Wood containers	244	103.1	108.8	111.2	113.1	109.4	100.1	100.9	106.1	106.5	–
Wood buildings and mobile homes	245	97.8	98.8	103.1	103.0	103.1	103.8	98.3	97.0	97.0	–
Miscellaneous wood products	249	95.9	102.4	107.7	110.5	114.2	115.3	111.8	115.4	114.2	–
Household furniture	251	99.4	102.0	104.5	107.1	110.5	110.6	112.5	116.9	122.2	–
Office furniture	252	94.3	97.5	95.0	94.1	102.5	103.2	100.5	101.1	106.8	–
Public building and related furniture	253	109.6	113.7	119.8	120.2	140.6	161.0	157.4	173.3	179.9	–
Partitions and fixtures	254	95.7	92.4	95.6	93.0	102.7	107.4	98.9	101.2	97.3	–
Miscellaneous furniture and fixtures	259	103.6	101.9	103.5	102.1	99.5	103.6	104.7	110.0	113.6	–
Pulp mills	261	99.6	107.4	116.7	128.3	137.3	122.5	128.9	131.9	132.7	–
Paper mills	262	103.9	103.6	102.3	99.2	103.3	102.4	110.2	119.0	111.9	–
Paperboard mills	263	105.5	101.9	100.6	101.4	104.4	108.4	114.9	119.5	118.7	–
Paperboard containers and boxes	265	99.7	101.5	101.3	103.4	105.2	107.9	108.4	105.1	106.5	–
Miscellaneous converted paper products	267	101.1	101.6	101.4	105.4	105.5	108.0	110.8	113.4	114.6	–
Newspapers	271	96.9	95.2	90.6	85.8	81.5	79.4	79.9	79.0	77.1	–
Periodicals	272	97.9	98.3	93.9	89.5	92.9	89.6	82.4	88.5	90.9	–
Books	273	99.1	94.1	96.6	100.8	97.7	103.5	103.0	101.5	100.5	–
Miscellaneous publishing	274	96.7	89.0	92.2	95.9	105.8	104.5	97.5	94.8	93.4	–
Commercial printing	275	100.0	101.1	102.5	102.0	108.0	106.9	106.5	107.2	108.7	–
Manifold business forms	276	98.7	89.7	93.0	89.1	94.5	91.1	82.0	76.9	74.5	–
Greeting cards	277	100.1	109.1	100.6	92.7	96.7	91.4	89.0	92.5	91.8	–
Blankbooks and bookbinding	278	95.6	94.2	99.4	96.1	103.6	98.7	105.4	108.7	115.0	–
Printing trade services	279	99.9	94.3	99.3	100.6	112.0	115.3	111.0	116.7	126.7	–
Industrial inorganic chemicals	281	105.7	104.2	106.7	109.6	109.6	105.4	102.0	109.2	110.4	–
Plastics materials and synthetics	282	98.8	99.7	100.9	100.0	107.5	111.9	125.0	128.7	125.1	–
Drugs	283	101.1	102.9	103.9	104.7	99.6	100.0	105.5	108.9	112.9	–
Soaps, cleaners, and toilet goods	284	102.0	100.7	103.8	105.3	104.4	108.7	111.2	118.6	121.4	–
Paints and allied products	285	101.4	103.3	106.3	104.3	102.9	108.8	116.7	118.0	124.2	–
Industrial organic chemicals	286	109.8	110.3	101.4	95.8	94.5	92.2	100.0	98.8	98.4	–
Agricultural chemicals	287	103.8	104.5	105.0	99.9	99.9	104.3	105.7	109.0	111.4	–
Miscellaneous chemical products	289	95.4	95.2	97.3	96.1	101.8	107.1	105.7	107.8	110.2	–
Petroleum refining	291	105.3	109.6	109.2	106.6	111.3	120.1	123.8	132.3	142.0	–
Asphalt paving and roofing materials	295	98.3	95.3	98.0	94.1	100.4	108.0	104.9	111.2	114.4	–
Miscellaneous petroleum and coal products	299	98.4	101.9	94.8	90.6	101.5	104.2	96.3	87.4	86.4	–

See footnotes at end of table.

42. Continued—Annual indexes of output per hour for selected 3-digit SIC industries

[1987 = 100]

Industry	SIC	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Tires and inner tubes	301	102.9	103.8	103.0	102.4	107.8	116.5	124.1	131.1	138.8	–
Hose and belting and gaskets and packing	305	103.7	96.3	96.1	92.4	97.8	99.7	102.7	104.6	107.2	–
Fabricated rubber products, n.e.c.	306	104.3	105.5	109.2	110.1	115.3	123.2	119.2	121.6	120.3	–
Miscellaneous plastics products, n.e.c.	308	100.5	101.7	105.6	108.1	114.1	116.4	120.4	120.7	124.9	–
Footwear, except rubber	314	101.3	101.1	101.1	94.4	104.2	105.2	113.0	117.1	125.8	–
Luggage	316	93.7	104.8	106.2	100.3	90.7	89.5	92.3	90.5	108.5	–
Handbags and personal leather goods	317	98.5	93.1	96.5	98.7	111.2	97.8	86.8	81.8	83.9	–
Flat glass	321	91.9	90.7	84.5	83.6	92.7	97.7	97.6	99.6	104.2	–
Glass and glassware, pressed or blown	322	100.6	100.2	104.8	102.3	108.9	108.7	112.9	115.7	121.9	–
Products of purchased glass	323	95.9	90.1	92.6	97.7	101.5	106.2	105.9	106.1	124.5	–
Cement, hydraulic	324	103.2	110.2	112.4	108.3	115.1	119.9	125.6	124.3	127.9	–
Structural clay products	325	98.8	103.1	109.6	109.8	111.5	105.8	113.0	111.6	119.5	–
Pottery and related products	326	99.6	97.1	98.6	95.8	99.5	100.3	108.4	109.3	119.4	–
Concrete, gypsum, and plaster products	327	100.8	102.4	102.3	101.2	102.5	104.6	101.5	104.5	107.5	–
Miscellaneous nonmetallic mineral products	329	103.0	95.5	95.4	94.0	104.3	104.5	106.3	107.8	111.3	–
Blast furnace and basic steel products	331	112.6	108.0	109.6	107.8	117.1	133.5	142.4	142.7	153.6	–
Iron and steel foundries	332	104.0	105.4	106.1	104.5	107.2	112.1	113.0	112.7	115.7	–
Primary nonferrous metals	333	107.8	106.1	102.3	110.9	102.0	108.0	105.4	111.1	111.0	–
Nonferrous rolling and drawing	335	95.5	93.6	92.7	90.9	95.8	98.2	101.1	99.1	103.9	–
Nonferrous foundries (castings)	336	102.6	105.1	104.0	103.6	103.6	108.5	112.1	117.8	122.6	–
Miscellaneous primary metal products	339	106.6	105.0	113.7	109.1	114.5	111.3	134.5	152.2	149.6	–
Metal cans and shipping containers	341	106.5	108.5	117.6	122.9	127.8	132.3	140.9	144.2	155.2	–
Cutlery, handtools, and hardware	342	97.8	101.7	97.3	96.8	100.1	104.0	109.2	111.3	117.9	–
Plumbing and heating, except electric	343	103.7	101.5	102.6	102.0	98.4	102.0	109.1	109.2	118.6	–
Fabricated structural metal products	344	100.4	96.9	98.8	100.0	103.9	104.8	107.7	105.8	106.7	–
Screw machine products, bolts, etc.	345	98.5	96.1	96.1	97.9	102.3	104.4	107.2	109.7	110.4	–
Metal forgings and stampings	346	101.5	99.8	95.6	92.9	103.7	108.7	108.5	109.3	113.7	–
Metal services, n.e.c.	347	108.3	102.4	104.7	99.4	111.6	120.6	123.0	127.7	127.5	–
Ordnance and accessories, n.e.c.	348	97.7	89.8	82.1	81.5	88.6	84.6	83.6	87.6	87.4	–
Miscellaneous fabricated metal products	349	101.4	95.9	97.5	97.3	100.9	101.8	103.0	106.4	108.6	–
Engines and turbines	351	106.8	110.7	106.5	105.8	103.3	109.2	122.3	122.7	136.9	–
Farm and garden machinery	352	106.3	110.7	116.5	112.9	113.9	118.6	125.0	134.7	136.6	–
Construction and related machinery	353	106.5	108.3	107.0	99.1	102.0	108.2	117.7	122.1	123.8	–
Metalworking machinery	354	101.0	103.5	101.1	96.4	104.3	107.4	109.9	114.8	114.7	–
Special industry machinery	355	104.6	108.3	107.5	108.3	106.0	113.6	121.2	132.3	134.7	–
General industrial machinery	356	106.0	101.6	101.5	101.6	101.6	104.8	106.7	109.0	110.0	–
Refrigeration and service machinery	358	102.1	106.0	103.6	100.7	104.9	108.6	110.7	112.7	114.4	–
Industrial machinery, n.e.c.	359	106.5	107.1	107.3	109.0	116.9	118.4	127.3	138.8	142.1	–
Electric distribution equipment	361	105.4	105.0	106.3	106.5	119.6	122.2	131.8	143.0	145.1	–
Electrical industrial apparatus	362	104.5	107.3	107.5	106.8	116.8	132.5	134.5	150.4	154.1	–
Household appliances	363	103.0	104.7	105.8	106.5	115.0	123.4	131.4	127.3	126.7	–
Electric lighting and wiring equipment	364	101.9	100.2	99.9	97.5	105.7	107.8	113.4	113.7	117.4	–
Communications equipment	366	110.4	107.0	120.9	123.8	145.4	149.0	164.8	169.6	189.6	–
Miscellaneous electrical equipment & supplies	369	102.8	99.6	90.6	98.6	101.3	108.2	110.5	114.1	123.0	–
Motor vehicles and equipment	371	103.2	103.3	102.4	96.6	104.2	105.3	107.1	104.1	104.1	–
Aircraft and parts	372	100.5	98.2	98.8	108.1	112.2	115.1	109.5	107.8	112.6	–
Ship and boat building and repairing	373	99.4	97.6	103.7	96.3	102.7	106.2	103.8	97.9	100.5	–
Railroad equipment	374	113.5	135.3	141.1	146.9	147.9	151.0	152.5	150.0	146.3	–
Motorcycles, bicycles, and parts	375	92.6	94.6	93.8	99.8	108.4	130.9	125.1	120.3	123.3	–
Guided missiles, space vehicles, parts	376	104.8	110.5	115.7	109.8	109.3	120.9	117.5	118.7	127.3	–
Search and navigation equipment	381	104.8	105.8	112.7	118.9	122.1	129.1	132.1	149.5	141.8	–
Measuring and controlling devices	382	103.1	101.3	106.1	112.9	119.9	124.0	133.8	146.4	150.4	–
Medical instruments and supplies	384	104.4	107.2	116.3	118.4	123.3	126.9	126.1	130.9	140.4	–
Ophthalmic goods	385	112.6	123.3	121.2	125.1	144.5	157.8	160.6	167.2	188.9	–
Photographic equipment & supplies	386	105.6	113.0	107.8	110.2	116.4	126.9	132.7	129.5	129.0	–
Jewelry, silverware, and plated ware	391	100.1	102.9	99.3	95.8	96.7	96.7	99.5	100.2	103.2	–
Musical instruments	393	101.8	96.1	97.1	96.9	96.0	95.6	88.7	86.9	78.9	–
Toys and sporting goods	394	104.8	106.0	108.1	109.7	104.9	114.2	109.7	113.6	120.0	–
Pens, pencils, office, and art supplies	395	108.6	113.3	118.7	117.3	111.7	112.0	130.2	135.4	144.4	–
Costume jewelry and notions	396	102.0	93.8	105.3	106.7	110.8	115.8	129.0	143.7	142.3	–
Miscellaneous manufactures	399	104.5	102.8	107.9	109.9	109.6	107.8	106.2	108.2	113.5	–
Transportation											
U.S. postal service[1]	431	99.9	99.7	104.0	103.7	104.5	107.1	106.6	106.5	104.7	108.3
Air transportation[2]	4512,13,22 (pts.)	99.5	95.8	92.9	92.5	96.9	100.2	105.7	108.6	111.1	112.1
Communications and utilities											
Telephone communications	481	106.2	111.6	113.3	119.8	127.7	135.5	142.2	148.1	159.4	160.2
Radio and television broadcasting	483	103.1	106.2	104.9	106.1	108.3	106.7	110.1	109.6	105.9	101.3
Cable and other pay TV services	484	102.0	99.7	92.5	87.5	88.3	85.1	83.3	84.3	81.6	84.1
Electric utilities	491,3 (pt.)	104.9	107.7	110.1	113.4	115.2	120.6	126.8	135.0	146.5	150.5
Gas utilities	492,3 (pt.)	105.5	103.5	94.8	94.0	95.3	107.0	102.2	107.5	116.0	119.9

See footnotes at end of table.

42. Continued—Annual indexes of output per hour for selected 3-digit SIC industries

[1987 = 100]

Industry	SIC	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Wholesale and retail trade											
Lumber and other building materials dealers	521	101.0	99.1	103.6	101.3	105.4	110.3	117.9	117.0	121.5	124.0
Paint, glass, and wallpaper stores	523	102.8	101.7	106.0	99.4	106.5	112.1	124.6	126.8	132.1	132.3
Hardware stores	525	108.6	115.2	110.5	102.5	107.2	106.5	114.2	110.7	115.2	115.8
Retail nurseries, lawn and garden supply stores	526	106.7	103.4	83.9	88.5	100.4	106.6	116.6	117.1	136.6	119.3
Department stores	531	99.2	97.0	94.2	98.2	100.9	108.1	111.2	113.4	121.0	125.7
Variety stores	533	101.9	124.4	151.2	154.2	167.7	185.5	191.8	205.8	232.6	246.1
Miscellaneous general merchandise stores	539	100.8	109.8	116.4	121.8	136.1	159.7	160.9	164.0	165.1	165.7
Grocery stores	541	98.9	95.4	94.6	93.7	93.3	93.0	92.9	91.9	90.2	89.1
Meat and fish (seafood) markets	542	99.0	97.6	96.8	88.4	95.8	95.8	95.3	95.5	88.8	90.8
Retail bakeries	546	89.8	83.3	89.7	94.7	94.0	88.0	90.1	91.2	87.3	97.6
New and used car dealers	551	103.4	102.5	106.1	104.1	106.5	107.6	108.7	107.1	108.2	107.3
Auto and home supply stores	553	103.2	101.6	102.7	99.0	100.0	100.9	107.0	112.6	113.9	109.7
Gasoline service stations	554	103.0	105.2	102.6	104.3	109.7	113.3	116.5	120.4	117.2	116.5
Men's and boys' wear stores	561	106.0	109.6	113.7	119.2	118.2	115.6	118.1	117.9	126.3	139.1
Women's clothing stores	562	97.8	99.5	101.5	103.0	112.2	116.8	115.8	122.8	133.6	134.1
Family clothing stores	565	102.0	104.9	104.5	106.4	111.7	114.9	121.2	135.2	140.5	143.2
Shoe stores	566	102.7	107.2	106.1	105.1	111.5	112.4	124.4	131.5	142.6	143.5
Miscellaneous apparel and accessory stores	569	96.3	95.2	88.6	78.8	89.1	95.2	105.4	131.2	139.9	128.0
Furniture and homefurnishings stores	571	98.6	100.9	101.8	101.5	108.4	108.5	110.5	114.7	122.5	125.7
Household appliance stores	572	98.5	103.5	102.8	105.2	113.9	115.0	116.8	131.6	132.0	149.4
Radio, television, computer, and music stores	573	118.6	114.6	119.6	128.3	137.8	153.4	178.8	200.0	209.3	220.4
Eating and drinking places	581	102.8	102.2	104.0	103.1	102.5	101.7	98.9	97.6	95.2	93.7
Drug and proprietary stores	591	101.9	102.5	103.6	104.7	103.6	104.8	104.5	105.2	107.5	113.8
Liquor stores	592	98.2	101.1	105.2	105.9	108.4	100.1	98.1	102.0	110.3	107.8
Used merchandise stores	593	105.3	104.9	100.3	98.6	110.4	110.4	111.6	111.6	121.6	122.1
Miscellaneous shopping goods stores	594	100.7	104.2	104.2	105.0	102.7	106.2	111.5	117.2	119.5	124.5
Nonstore retailers	596	105.6	110.8	108.8	109.3	122.1	121.8	130.6	125.7	138.3	148.0
Fuel dealers	598	95.6	92.0	84.4	85.3	84.4	92.2	99.7	112.3	113.3	106.5
Retail stores, n.e.c.	599	105.9	103.1	113.7	103.2	111.6	115.5	121.3	120.5	130.6	137.8
Finance and services											
Commercial banks	602	102.8	104.8	107.7	110.1	111.0	118.9	122.3	127.6	130.9	134.1
Hotels and motels	701	97.6	95.0	96.1	99.1	107.8	106.2	109.6	110.1	109.7	107.9
Laundry, cleaning, and garment services	721	97.2	99.7	101.8	99.2	98.3	98.9	104.0	105.5	108.7	108.1
Photographic studios, portrait	722	100.1	94.9	96.6	92.8	97.7	105.9	117.4	129.3	126.4	135.4
Beauty shops	723	95.1	99.6	96.8	94.8	99.6	95.7	99.8	103.5	106.3	108.9
Barber shops	724	108.8	111.6	100.2	94.1	112.1	120.8	117.7	114.6	127.6	153.4
Funeral services and crematories	726	102.5	97.9	90.9	89.5	103.2	98.2	103.8	99.7	97.1	101.3
Automotive repair shops	753	105.7	108.1	106.9	98.7	103.3	104.0	112.3	119.5	114.1	115.8
Motion picture theaters	783	107.1	114.3	115.8	116.0	110.8	109.8	106.5	101.4	100.4	100.8

[1] Refers to output per full-time equivalent employee year on fiscal basis.

[2] Refers to output per employee.

n.e.c. = not elsewhere classified.

NOTE: Dash indicates data not available.

43. Unemployment rates, approximating U.S. concepts, in nine countries, quarterly data seasonally adjusted

Country	Annual average		1997	1998				1999		
	1997	1998	IV	I	II	III	IV	I	II	III
United States	4.9	4.5	4.7	4.7	4.4	4.5	4.4	4.3	4.3	4.2
Canada	9.2	8.3	8.9	8.6	8.4	8.3	8.0	7.8	8.0	7.6
Australia	8.6	8.0	8.3	8.1	8.0	8.1	7.7	7.4	7.4	7.2
Japan	3.4	4.1	3.5	3.7	4.2	4.3	4.4	4.7	4.8	4.8
France	12.4	11.7	12.3	12.0	11.7	11.7	11.5	11.3	11.2	11.1
Germany	9.9	9.4	10.0	9.9	9.5	9.1	9.1	9.0	9.0	9.1
Italy[1]	12.3	12.3	12.3	12.2	12.3	12.4	12.4	12.3	12.1	–
Sweden	10.1	8.4	9.1	8.8	8.6	8.5	7.7	7.4	7.0	7.1
United Kingdom	7.0	6.3	6.6	6.4	6.3	6.3	6.3	6.3	6.1	5.9

[1] Quarterly rates are for the first month of the quarter.

– Data not available.

NOTE: Quarterly figures for France, Germany, and the United Kingdom are calculated by applying annual adjustment factors to current published data, and therefore should be viewed as less precise indicators of unemployment under U.S. concepts than the annual figures. See "Notes on the data" for information on breaks in series. For further qualifications and historical data, see *Comparative Civilian Labor Force Statistics, Ten Countries, 1959–1998* (Bureau of Labor Statistics, Oct. 22, 1999).

44. Annual data: Employment status of the working-age population, approximating U.S. concepts, 10 countries

[Numbers in thousands]

Employment status and country	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
Civilian labor force										
United States[1]	123,869	125,840	126,346	128,105	129,200	131,056	132,304	133,943	136,297	137,673
Canada	14,151	14,329	14,408	14,482	14,663	14,832	14,928	15,145	15,354	15,632
Australia	8,228	8,444	8,490	8,562	8,619	8,776	9,001	9,127	9,221	9,347
Japan	61,920	63,050	64,280	65,040	65,470	65,780	65,990	66,450	67,200	67,240
France	24,170	24,300	24,490	24,550	24,650	24,760	24,820	25,080	25,140	25,390
Germany [2]	28,840	29,410	39,120	39,040	39,130	39,210	39,050	39,180	39,450	39,430
Italy	22,530	22,670	22,940	22,910	22,760	22,640	22,700	22,820	22,850	23,000
Netherlands	6,430	6,640	6,750	6,950	7,090	7,190	7,270	7,370	7,530	7,720
Sweden	4,552	4,597	4,591	4,520	4,443	4,418	4,460	4,459	4,418	4,402
United Kingdom	28,580	28,730	28,610	28,410	28,310	28,280	28,480	28,620	28,760	28,870
Participation rate[3]										
United States[1]	66.5	66.5	66.2	66.4	66.3	66.6	66.6	66.8	67.1	67.1
Canada	67.5	67.3	66.7	65.9	65.5	65.3	64.8	64.9	64.8	65.1
Australia	64.0	64.6	64.1	63.9	63.6	63.9	64.6	64.6	64.3	64.4
Japan	62.2	62.6	63.2	63.4	63.3	63.1	62.9	63.0	63.2	62.8
France	56.1	56.0	56.0	55.8	55.6	55.5	55.2	55.4	55.2	55.6
Germany [2]	55.2	55.3	58.9	58.3	58.0	57.6	57.2	57.4	57.6	57.6
Italy	47.3	47.2	47.7	47.5	48.1	47.5	47.5	47.7	47.7	47.8
Netherlands	54.7	56.1	56.5	57.8	58.5	59.0	59.3	59.8	60.7	62.0
Sweden	67.3	67.4	67.0	65.7	64.5	63.7	64.1	64.0	63.4	63.1
United Kingdom	64.0	64.1	63.7	63.1	62.8	62.5	62.7	62.7	62.8	62.7
Employed										
United States[1]	117,342	118,793	117,718	118,492	120,259	123,060	124,900	126,708	129,558	131,463
Canada	13,086	13,165	12,916	12,842	13,015	13,292	13,506	13,676	13,941	14,326
Australia	7,720	7,859	7,676	7,637	7,680	7,921	8,235	8,344	8,429	8,597
Japan	60,500	61,710	62,920	63,620	63,810	63,860	63,890	64,200	64,900	64,450
France	21,850	22,100	22,140	21,990	21,740	21,710	21,890	21,950	22,010	22,410
Germany [2]	27,200	27,950	36,910	36,420	36,020	35,900	35,850	35,680	35,540	35,720
Italy	20,770	21,080	21,360	21,230	20,430	20,080	19,980	20,060	20,050	20,170
Netherlands	5,980	6,230	6,350	6,560	6,620	6,670	6,760	6,900	7,130	7,410
Sweden	4,480	4,513	4,447	4,265	4,028	3,992	4,056	4,019	3,973	4,034
United Kingdom	26,510	26,740	26,090	25,530	25,340	25,550	26,000	26,280	26,740	27,050
Employment-population ratio[4]										
United States[1]	63.0	62.8	61.7	61.5	61.7	62.5	62.9	63.2	63.8	64.1
Canada	62.4	61.9	59.8	58.4	58.2	58.5	58.6	58.6	58.9	59.7
Australia	60.1	60.1	57.9	57.0	56.6	57.7	59.1	59.1	58.8	59.2
Japan	60.8	61.3	61.8	62.0	61.7	61.3	60.9	60.9	61.0	60.2
France	50.7	50.9	50.6	49.9	49.0	48.7	48.7	48.5	48.3	49.1
Germany [2]	52.0	52.6	55.5	54.4	53.4	52.8	52.5	52.2	51.9	52.2
Italy	43.6	43.9	44.5	44.0	43.1	42.1	41.8	41.9	41.8	41.9
Netherlands	50.9	52.6	53.2	54.5	54.7	54.7	55.1	55.9	57.5	59.5
Sweden	66.2	66.1	64.9	62.0	58.5	57.6	58.3	57.6	57.0	57.8
United Kingdom	59.3	59.6	58.0	56.7	56.2	56.5	57.2	57.6	58.3	58.8
Unemployed										
United States[1]	6,528	7,047	8,628	9,613	8,940	7,996	7,404	7,236	6,739	6,210
Canada	1,065	1,164	1,492	1,640	1,649	1,541	1,422	1,469	1,414	1,305
Australia	508	585	814	925	939	856	766	783	791	750
Japan	1,420	1,340	1,360	1,420	1,660	1,920	2,100	2,250	2,300	2,790
France	2,320	2,210	2,350	2,560	2,910	3,050	2,920	3,130	3,120	2,980
Germany [2]	1,640	1,460	2,210	2,620	3,110	3,320	3,200	3,500	3,910	3,710
Italy	1,760	1,590	1,580	1,680	2,330	2,560	2,720	2,760	2,800	2,840
Netherlands	450	410	400	390	470	520	510	470	400	310
Sweden	72	84	144	255	415	426	404	440	445	368
United Kingdom	2,070	1,990	2,520	2,880	2,970	2,730	2,480	2,340	2,020	1,820
Unemployment rate										
United States[1]	5.3	5.6	6.8	7.5	6.9	6.1	5.6	5.4	4.9	4.5
Canada	7.5	8.1	10.4	11.3	11.2	10.4	9.5	9.7	9.2	8.3
Australia	6.2	6.9	9.6	10.8	10.9	9.7	8.5	8.6	8.6	8.0
Japan	2.3	2.1	2.1	2.2	2.5	2.9	3.2	3.4	3.4	4.1
France	9.6	9.1	9.6	10.4	11.8	12.3	11.8	12.5	12.4	11.7
Germany [2]	5.7	5.0	5.6	6.7	7.9	8.5	8.2	8.9	9.9	9.4
Italy	7.8	7.0	6.9	7.3	10.2	11.3	12.0	12.1	12.3	12.3
Netherlands	7.0	6.2	5.9	5.6	6.6	7.2	7.0	6.4	5.3	4.0
Sweden	1.6	1.8	3.1	5.6	9.3	9.6	9.1	9.9	10.1	8.4
United Kingdom	7.2	6.9	8.8	10.1	10.5	9.7	8.7	8.2	7.0	6.3

[1] Data for 1994 are not directly comparable with data for 1993 and earlier years. For additional information, see the box note under "Employment and Unemployment Data" in the notes to this section.

[2] Data from 1991 onward refer to unified Germany. See *Comparative Civilian Labor Force Statistics, Ten Countries, 1959–1998*, October 22, 1999, on the Internet at **http://stats.bls.gov/flsdata.htm**.

[3] Labor force as a percent of the working-age population.

[4] Employment as a percent of the working-age population.

NOTE: See "Notes on the data" for information on breaks in series for the United States, France, Germany, Italy, the Netherlands, and Sweden. Dash indicates data not available.

45. Annual indexes of manufacturing productivity and related measures, 12 countries

[1992 = 100]

Item and country	1960	1970	1980	1987	1988	1989	1990	1991	1993	1994	1995	1996	1997	1998
Output per hour														
United States	–	–	71.9	94.4	98.0	97.1	97.8	98.3	102.1	108.3	114.9	117.3	122.1	127.0
Canada	40.7	59.2	75.3	91.3	91.1	92.4	95.3	95.1	102.5	106.2	108.9	107.3	110.0	111.7
Japan	14.0	38.0	63.9	81.2	84.8	89.5	95.4	99.4	100.5	101.8	109.3	115.8	120.2	120.5
Belgium	18.0	32.9	65.4	88.9	92.0	96.9	96.8	99.1	102.5	108.4	113.2	114.7	121.7	122.4
Denmark	29.9	52.7	90.3	90.6	94.1	99.6	99.1	99.6	104.5	–	–	–	–	–
France	21.8	43.1	66.7	81.8	87.4	91.9	93.5	96.9	100.6	108.5	114.5	115.0	123.3	127.5
Germany	29.2	52.0	77.2	88.1	91.5	94.6	99.0	101.9	100.6	107.9	111.2	115.1	121.8	127.1
Italy	19.6	36.8	64.1	85.1	86.7	89.4	92.5	95.2	102.9	105.6	109.3	110.3	113.4	113.6
Netherlands	19.3	38.1	69.2	91.7	93.8	97.1	98.6	99.6	101.9	114.2	119.9	124.4	130.7	132.8
Norway	36.7	57.8	76.7	93.3	92.1	94.6	96.6	97.5	100.6	101.4	102.0	102.0	101.9	104.1
Sweden	27.6	52.8	74.0	90.1	90.8	93.8	95.0	95.0	106.7	116.1	122.4	125.4	133.6	136.5
United Kingdom	31.2	44.7	56.2	79.5	82.4	86.2	88.4	92.2	104.1	106.8	104.7	103.3	103.8	104.8
Output														
United States	–	–	77.3	97.9	104.5	104.0	102.5	98.7	103.5	112.2	119.6	121.6	128.8	134.2
Canada	34.2	60.5	85.4	103.2	109.3	110.8	106.6	98.8	105.1	113.2	118.8	120.2	128.0	133.0
Japan	10.7	38.8	59.9	78.4	84.6	90.2	96.3	101.4	96.0	95.4	100.6	106.7	110.0	103.9
Belgium	30.7	57.6	78.2	88.8	93.3	99.1	101.0	100.7	97.0	101.4	104.2	104.2	109.0	111.8
Denmark	40.8	68.0	91.3	99.3	100.8	104.3	102.7	101.7	99.0	109.3	115.1	119.0	121.7	127.3
France	31.0	64.1	88.7	87.2	92.2	97.2	99.1	99.8	95.7	100.3	104.9	104.6	110.3	114.6
Germany	41.5	70.9	85.3	88.0	90.9	94.0	99.1	102.8	91.8	93.5	93.7	92.5	95.8	100.7
Italy	21.4	44.7	78.4	88.2	94.5	98.1	99.6	99.2	96.4	102.2	107.2	106.7	110.4	112.5
Netherlands	31.7	59.5	77.4	89.5	92.8	96.9	100.1	100.6	98.2	104.2	107.8	110.6	116.1	118.8
Norway	56.5	89.1	103.6	110.7	105.3	101.3	100.2	98.3	102.7	106.7	109.0	110.1	113.3	116.4
Sweden	46.5	81.7	91.8	107.7	110.2	111.6	110.6	103.6	101.3	115.7	130.1	132.9	140.3	146.4
United Kingdom	67.8	90.4	87.2	94.5	101.5	105.5	105.4	100.1	101.5	106.2	107.8	108.3	109.3	109.7
Total hours														
United States	92.1	104.4	107.5	103.8	106.6	107.1	104.8	100.4	101.4	103.6	104.0	103.7	105.5	105.6
Canada	84.1	102.1	113.5	113.0	120.0	119.9	111.9	103.8	102.6	106.6	109.1	112.0	115.4	119.0
Japan	76.3	102.3	93.8	96.6	99.8	100.8	100.9	102.0	95.6	93.7	92.0	92.2	91.5	86.2
Belgium	170.7	174.7	119.7	100.0	101.5	102.3	104.3	101.5	94.7	93.6	92.0	90.8	89.5	91.3
Denmark	136.5	129.0	101.1	109.6	107.2	104.7	103.7	102.1	94.8	–	–	–	–	–
France	142.1	148.7	133.1	106.6	105.5	105.8	105.9	103.0	95.1	92.4	91.6	91.0	89.5	89.9
Germany	142.3	136.3	110.5	99.9	99.3	99.3	100.1	100.9	91.3	86.7	84.3	80.4	78.6	79.3
Italy	109.0	121.2	122.4	103.6	108.9	109.7	107.7	104.2	93.6	96.7	98.0	96.7	97.4	99.0
Netherlands	164.7	156.4	111.9	97.6	98.9	99.7	101.6	101.0	96.4	91.3	90.0	88.9	88.8	89.5
Norway	154.0	154.3	135.0	118.6	114.3	107.1	103.7	100.8	102.1	105.2	106.9	107.9	111.1	111.9
Sweden	168.3	154.7	124.0	119.5	121.4	119.0	116.4	109.0	94.9	99.6	106.3	106.0	105.0	107.3
United Kingdom	217.4	202.1	155.3	118.9	123.2	122.3	119.2	108.5	97.5	99.4	103.0	104.8	105.4	104.7
Compensation per hour														
United States	14.9	23.8	55.8	80.9	84.2	86.9	91.0	95.8	102.9	105.8	108.3	110.7	115.1	120.0
Canada	10.4	17.8	47.7	75.3	77.8	82.5	89.5	94.7	99.6	100.4	103.6	102.8	106.7	110.8
Japan	4.3	16.5	58.6	77.9	79.2	84.2	90.7	95.9	104.6	106.7	109.5	110.9	114.1	115.0
Belgium	5.4	13.7	52.5	79.7	81.1	85.9	90.1	97.3	104.8	106.1	109.2	112.0	115.1	115.9
Denmark	4.6	13.3	49.6	80.1	82.9	87.7	92.7	95.9	104.6	–	–	–	–	–
France	4.3	10.3	40.8	78.6	81.6	86.0	90.6	96.2	102.8	105.0	107.7	109.4	112.4	114.0
Germany	8.1	20.7	53.6	76.0	79.1	83.2	89.4	95.1	105.9	111.7	117.7	123.7	126.6	127.6
Italy	1.6	4.7	28.2	66.7	69.3	75.9	84.4	96.3	107.5	107.8	112.8	120.9	125.9	124.8
Netherlands	6.4	20.2	64.4	87.8	87.7	88.5	90.8	95.2	103.7	108.2	110.6	113.9	117.5	117.8
Norway	4.7	11.8	39.0	78.5	83.3	87.2	92.3	97.5	101.5	104.4	109.2	113.6	119.1	126.4
Sweden	4.1	10.8	37.4	67.3	71.7	79.4	87.6	95.4	98.0	101.1	106.2	113.4	118.3	121.5
United Kingdom	3.1	6.3	33.2	64.8	67.7	72.9	80.9	90.5	104.3	106.5	107.4	108.2	112.8	119.2
Unit labor costs: National currency basis														
United States	–	–	77.6	85.7	85.9	89.5	93.1	97.5	100.8	97.7	94.3	94.3	94.3	94.5
Canada	25.5	30.0	63.3	82.5	85.5	89.2	93.9	99.6	97.2	94.5	95.2	95.8	96.2	99.2
Japan	30.9	43.3	91.7	96.0	93.4	94.0	95.0	96.5	104.1	104.9	100.1	95.8	95.0	95.4
Belgium	30.1	41.7	80.3	89.7	88.1	88.7	93.0	98.1	102.3	97.9	96.4	97.6	94.6	94.7
Denmark	15.4	25.2	55.0	88.4	88.2	88.1	93.6	96.3	100.1	93.0	93.4	92.3	95.3	94.9
France	19.5	24.0	61.2	96.2	93.4	93.6	96.8	99.3	102.2	96.8	94.0	95.1	91.1	89.4
Germany	27.8	39.8	69.4	86.3	86.5	87.9	90.3	93.3	105.3	103.6	105.9	107.5	103.9	100.4
Italy	8.0	12.7	44.0	78.3	79.9	84.9	91.3	98.4	104.4	102.1	103.2	109.6	111.1	109.8
Netherlands	33.2	53.0	93.1	95.8	93.5	91.1	92.1	95.6	101.8	94.8	92.3	91.5	89.9	88.7
Norway	12.9	20.4	50.8	84.1	90.4	92.2	95.6	100.0	100.9	102.9	107.1	111.4	116.9	121.4
Sweden	14.9	20.5	50.6	74.7	79.0	84.7	92.3	100.4	91.8	87.0	86.8	90.4	88.5	89.0
United Kingdom	10.5	14.1	59.1	81.5	82.2	84.6	91.6	98.1	100.2	99.7	102.5	104.7	108.7	113.8
Unit labor costs: U.S. dollar basis														
United States	–	–	77.6	85.7	85.9	89.5	93.1	97.5	100.8	97.7	94.3	94.3	94.3	94.5
Canada	31.9	34.7	65.4	75.2	83.9	91.0	97.2	105.0	91.1	83.6	83.8	84.9	83.9	80.8
Japan	10.9	15.3	51.3	84.2	92.4	86.3	83.1	90.9	118.8	130.1	135.1	111.7	99.5	92.3
Belgium	19.4	27.0	88.3	77.2	77.0	72.3	89.5	92.3	95.1	94.2	105.2	101.4	84.9	83.8
Denmark	13.5	20.3	58.9	77.9	79.0	72.6	91.3	90.8	93.2	88.3	100.7	96.1	87.0	85.5
France	21.1	23.0	76.7	84.7	82.9	77.7	94.1	93.1	95.5	92.4	99.8	98.4	82.6	80.2
Germany	10.4	17.1	59.6	74.9	76.9	73.0	87.3	87.8	99.4	99.8	115.5	111.6	93.5	89.1
Italy	16.0	24.9	63.3	74.4	75.6	76.2	93.8	97.6	81.8	78.1	78.0	87.5	80.3	77.9
Netherlands	15.5	25.8	82.4	83.1	83.1	75.5	88.9	89.8	96.3	91.6	101.2	95.4	81.0	78.6
Norway	11.3	17.8	63.9	77.5	86.1	82.9	95.0	95.7	88.3	90.7	105.0	107.1	102.5	99.9
Sweden	16.8	23.0	69.6	68.5	75.0	76.4	90.8	96.6	68.6	65.7	70.8	78.5	67.5	65.2
United Kingdom	15.6	19.2	77.8	75.7	82.9	78.5	92.5	98.2	85.2	86.4	91.6	92.5	100.8	106.8

– Data not available.

46. Occupational injury and illness rates by industry,[1] United States

Industry and type of case[2]	Incidence rates per 100 full-time workers[3]											
	1987	1988	1989[1]	1990	1991	1992	1993[4]	1994[4]	1995[4]	1996[4]	1997[4]	1998[4]
PRIVATE SECTOR[5]												
Total cases	8.3	8.6	8.6	8.8	8.4	8.9	8.5	8.4	8.1	7.4	7.1	6.7
Lost workday cases	3.8	4.0	4.0	4.1	3.9	3.9	3.8	3.8	3.6	3.4	3.3	3.1
Lost workdays	69.9	76.1	78.7	84.0	86.5	93.8	–	–	–	–	–	–
Agriculture, forestry, and fishing[5]												
Total cases	11.2	10.9	10.9	11.6	10.8	11.6	11.2	10.0	9.7	8.7	8.4	7.9
Lost workday cases	5.7	5.6	5.7	5.9	5.4	5.4	5.0	4.7	4.3	3.9	4.1	3.9
Lost workdays	94.1	101.8	100.9	112.2	108.3	126.9	–	–	–	–	–	–
Mining												
Total cases	8.5	8.8	8.5	8.3	7.4	7.3	6.8	6.3	6.2	5.4	5.9	4.9
Lost workday cases	4.9	5.1	4.8	5.0	4.5	4.1	3.9	3.9	3.9	3.2	3.7	2.9
Lost workdays	144.0	152.1	137.2	119.5	129.6	204.7	–	–	–	–	–	–
Construction												
Total cases	14.7	14.6	14.3	14.2	13.0	13.1	12.2	11.8	10.6	9.9	9.5	8.8
Lost workday cases	6.8	6.8	6.8	6.7	6.1	5.8	5.5	5.5	4.9	4.5	4.4	4.0
Lost workdays	135.8	142.2	143.3	147.9	148.1	161.9	–	–	–	–	–	–
General building contractors:												
Total cases	14.2	14.0	13.9	13.4	12.0	12.2	11.5	10.9	9.8	9.0	8.5	8.4
Lost workday cases	6.5	6.4	6.5	6.4	5.5	5.4	5.1	5.1	4.4	4.0	3.7	3.9
Lost workdays	134.0	132.2	137.3	137.6	132.0	142.7	–	–	–	–	–	–
Heavy construction, except building:												
Total cases	14.5	15.1	13.8	13.8	12.8	12.1	11.1	10.2	9.9	9.0	8.7	8.2
Lost workday cases	6.4	7.0	6.5	6.3	6.0	5.4	5.1	5.0	4.8	4.3	4.3	4.1
Lost workdays	139.1	162.3	147.1	144.6	160.1	165.8	–	–	–	–	–	–
Special trades contractors:												
Total cases	15.0	14.7	14.6	14.7	13.5	13.8	12.8	12.5	11.1	10.4	10.0	9.1
Lost workday cases	7.1	7.0	6.9	6.9	6.3	6.1	5.8	5.8	5.0	4.8	4.7	4.1
Lost workdays	135.7	141.1	144.9	153.1	151.3	168.3	–	–	–	–	–	–
Manufacturing												
Total cases	11.9	13.1	13.1	13.2	12.7	12.5	12.1	12.2	11.6	10.6	10.3	9.7
Lost workday cases	5.3	5.7	5.8	5.8	5.6	5.4	5.3	5.5	5.3	4.9	4.8	4.7
Lost workdays	95.5	107.4	113.0	120.7	121.5	124.6	–	–	–	–	–	–
Durable goods:												
Total cases	12.5	14.2	14.1	14.2	13.6	13.4	13.1	13.5	12.8	11.6	11.3	10.7
Lost workday cases	5.4	5.9	6.0	6.0	5.7	5.5	5.4	5.7	5.6	5.1	5.1	5.0
Lost workdays	96.8	111.1	116.5	123.3	122.9	126.7	–	–	–	–	–	–
Lumber and wood products:												
Total cases	18.9	19.5	18.4	18.1	16.8	16.3	15.9	15.7	14.9	14.2	13.5	13.2
Lost workday cases	9.6	10.0	9.4	8.8	8.3	7.6	7.6	7.7	7.0	6.8	6.5	6.8
Lost workdays	176.5	189.1	177.5	172.5	172.0	165.8	–	–	–	–	–	–
Furniture and fixtures:												
Total cases	15.4	16.6	16.1	16.9	15.9	14.8	14.6	15.0	13.9	12.2	12.0	11.4
Lost workday cases	6.7	7.3	7.2	7.8	7.2	6.6	6.5	7.0	6.4	5.4	5.8	5.7
Lost workdays	103.6	115.7	–	–	–	128.4	–	–	–	–	–	–
Stone, clay, and glass products:												
Total cases	14.9	16.0	15.5	15.4	14.8	13.6	13.8	13.2	12.3	12.4	11.8	11.8
Lost workday cases	7.1	7.5	7.4	7.3	6.8	6.1	6.3	6.5	5.7	6.0	5.7	6.0
Lost workdays	135.8	141.0	149.8	160.5	156.0	152.2	–	–	–	–	–	–
Primary metal industries:												
Total cases	17.0	19.4	18.7	19.0	17.7	17.5	17.0	16.8	16.5	15.0	15.0	14.0
Lost workday cases	7.4	8.2	8.1	8.1	7.4	7.1	7.3	7.2	7.2	6.8	7.2	7.0
Lost workdays	145.8	161.3	168.3	180.2	169.1	175.5	–	–	–	–	–	–
Fabricated metal products:												
Total cases	17.0	18.8	18.5	18.7	17.4	16.8	16.2	16.4	15.8	14.4	14.2	13.9
Lost workday cases	7.2	8.0	7.9	7.9	7.1	6.6	6.7	6.7	6.9	6.2	6.4	6.5
Lost workdays	121.9	138.8	147.6	155.7	146.6	144.0	–	–	–	–	–	–
Industrial machinery and equipment:												
Total cases	11.3	12.1	12.1	12.0	11.2	11.1	11.1	11.6	11.2	9.9	10.0	9.5
Lost workday cases	4.4	4.7	4.8	4.7	4.4	4.2	4.2	4.4	4.4	4.0	4.1	4.0
Lost workdays	72.7	82.8	86.8	88.9	86.6	87.7	–	–	–	–	–	–
Electronic and other electrical equipment:												
Total cases	7.2	8.0	9.1	9.1	8.6	8.4	8.3	8.3	7.6	6.8	6.6	5.9
Lost workday cases	3.1	3.3	3.9	3.8	3.7	3.6	3.5	3.6	3.3	3.1	3.1	2.8
Lost workdays	55.9	64.6	77.5	79.4	83.0	81.2	–	–	–	–	–	–
Transportation equipment:												
Total cases	13.5	17.7	17.7	17.8	18.3	18.7	18.5	19.6	18.6	16.3	15.4	14.6
Lost workday cases	5.7	6.6	6.8	6.9	7.0	7.1	7.1	7.8	7.9	7.0	6.6	6.6
Lost workdays	105.7	134.2	138.6	153.7	166.1	186.6	–	–	–	–	–	–
Instruments and related products:												
Total cases	5.8	6.1	5.6	5.9	6.0	5.9	5.6	5.9	5.3	5.1	4.8	4.0
Lost workday cases	2.4	2.6	2.5	2.7	2.7	2.7	2.5	2.7	2.4	2.3	2.3	1.9
Lost workdays	43.9	51.5	55.4	57.8	64.4	65.3	–	–	–	–	–	–
Miscellaneous manufacturing industries:												
Total cases	10.7	11.3	11.1	11.3	11.3	10.7	10.0	9.9	9.1	9.5	8.9	8.1
Lost workday cases	4.6	5.1	5.1	5.1	5.1	5.0	4.6	4.5	4.3	4.4	4.2	3.9
Lost workdays	81.5	91.0	97.6	113.1	104.0	108.2	–	–	–	–	–	–

See footnotes at end of table.

46. Continued—Occupational injury and illness rates by industry,[1] United States

Industry and type of case[2]	Incidence rates per 100 full-time workers[3]											
	1987	1988	1989[1]	1990	1991	1992	1993[4]	1994[4]	1995[4]	1996[4]	1997[4]	1998[4]
Nondurable goods:												
Total cases	11.1	11.4	11.6	11.7	11.5	11.3	10.7	10.5	9.9	9.2	8.8	8.2
Lost workday cases	5.1	5.4	5.5	5.6	5.5	5.3	5.0	5.1	4.9	4.6	4.4	4.3
Lost workdays	93.5	101.7	107.8	116.9	119.7	121.8	–	–	–	–	–	–
Food and kindred products:												
Total cases	17.7	18.5	18.5	20.0	19.5	18.8	17.6	17.1	16.3	15.0	14.5	13.6
Lost workday cases	8.6	9.2	9.3	9.9	9.9	9.5	8.9	9.2	8.7	8.0	8.0	7.5
Lost workdays	153.7	169.7	174.7	202.6	207.2	211.9	–	–	–	–	–	–
Tobacco products:												
Total cases	8.6	9.3	8.7	7.7	6.4	6.0	5.8	5.3	5.6	6.7	5.9	6.4
Lost workday cases	2.5	2.9	3.4	3.2	2.8	2.4	2.3	2.4	2.6	2.8	2.7	3.1
Lost workdays	46.4	53.0	64.2	62.3	52.0	42.9	–	–	–	–	–	–
Textile mill products:												
Total cases	9.0	9.6	10.3	9.6	10.1	9.9	9.7	8.7	8.2	7.8	6.7	6.7
Lost workday cases	3.6	4.0	4.2	4.0	4.4	4.2	4.1	4.0	4.1	3.6	3.1	3.4
Lost workdays	65.9	78.8	81.4	85.1	88.3	87.1	–	–	–	–	–	–
Apparel and other textile products:												
Total cases	7.4	8.1	8.6	8.8	9.2	9.5	9.0	8.9	8.2	7.4	7.0	6.2
Lost workday cases	3.1	3.5	3.8	3.9	4.2	4.0	3.8	3.9	3.6	3.3	3.1	2.6
Lost workdays	59.5	68.2	80.5	92.1	99.9	104.6	–	–	–	–	–	–
Paper and allied products:												
Total cases	12.8	13.1	12.7	12.1	11.2	11.0	9.9	9.6	8.5	7.9	7.3	7.1
Lost workday cases	5.8	5.9	5.8	5.5	5.0	5.0	4.6	4.5	4.2	3.8	3.7	3.7
Lost workdays	122.3	124.3	132.9	124.8	122.7	125.9	–	–	–	–	–	–
Printing and publishing:												
Total cases	6.7	6.6	6.9	6.9	6.7	7.3	6.9	6.7	6.4	6.0	5.7	5.4
Lost workday cases	3.1	3.2	3.3	3.3	3.2	3.2	3.1	3.0	3.0	2.8	2.7	2.8
Lost workdays	55.1	59.8	63.8	69.8	74.5	74.8	–	–	–	–	–	–
Chemicals and allied products:												
Total cases	7.0	7.0	7.0	6.5	6.4	6.0	5.9	5.7	5.5	4.8	4.8	4.2
Lost workday cases	3.1	3.3	3.2	3.1	3.1	2.8	2.7	2.8	2.7	2.4	2.3	2.1
Lost workdays	58.8	59.0	63.4	61.6	62.4	64.2	–	–	–	–	–	–
Petroleum and coal products:												
Total cases	7.3	7.0	6.6	6.6	6.2	5.9	5.2	4.7	4.8	4.6	4.3	3.9
Lost workday cases	3.1	3.2	3.3	3.1	2.9	2.8	2.5	2.3	2.4	2.5	2.2	1.8
Lost workdays	65.9	68.4	68.1	77.3	68.2	71.2	–	–	–	–	–	–
Rubber and miscellaneous plastics products:												
Total cases	15.9	16.3	16.2	16.2	15.1	14.5	13.9	14.0	12.9	12.3	11.9	11.2
Lost workday cases	7.6	8.1	8.0	7.8	7.2	6.8	6.5	6.7	6.5	6.3	5.8	5.8
Lost workdays	130.8	142.9	147.2	151.3	150.9	153.3	–	–	–	–	–	–
Leather and leather products:												
Total cases	12.4	11.4	13.6	12.1	12.5	12.1	12.1	12.0	11.4	10.7	10.6	9.8
Lost workday cases	5.8	5.6	6.5	5.9	5.9	5.4	5.5	5.3	4.8	4.5	4.3	4.5
Lost workdays	114.5	128.2	130.4	152.3	140.8	128.5	–	–	–	–	–	–
Transportation and public utilities												
Total cases	8.4	8.9	9.2	9.6	9.3	9.1	9.5	9.3	9.1	8.7	8.2	7.3
Lost workday cases	4.9	5.1	5.3	5.5	5.4	5.1	5.4	5.5	5.2	5.1	4.8	4.3
Lost workdays	108.1	118.6	121.5	134.1	140.0	144.0	–	–	–	–	–	–
Wholesale and retail trade												
Total cases	7.7	7.8	8.0	7.9	7.6	8.4	8.1	7.9	7.5	6.8	6.7	6.5
Lost workday cases	3.4	3.5	3.6	3.5	3.4	3.5	3.4	3.4	3.2	2.9	3.0	2.8
Lost workdays	56.1	60.9	63.5	65.6	72.0	80.1	–	–	–	–	–	–
Wholesale trade:												
Total cases	7.4	7.6	7.7	7.4	7.2	7.6	7.8	7.7	7.5	6.6	6.5	6.5
Lost workday cases	3.7	3.8	4.0	3.7	3.7	3.6	3.7	3.8	3.6	3.4	3.2	3.3
Lost workdays	64.0	69.2	71.9	71.5	79.2	82.4	–	–	–	–	–	–
Retail trade:												
Total cases	7.8	7.9	8.1	8.1	7.7	8.7	8.2	7.9	7.5	6.9	6.8	6.5
Lost workday cases	3.3	3.4	3.4	3.4	3.3	3.4	3.3	3.3	3.0	2.8	2.9	2.7
Lost workdays	52.9	57.6	60.0	63.2	69.1	79.2	–	–	–	–	–	–
Finance, insurance, and real estate												
Total cases	2.0	2.0	2.0	2.4	2.4	2.9	2.9	2.7	2.6	2.4	2.2	1.9
Lost workday cases	.9	.9	.9	1.1	1.1	1.2	1.2	1.1	1.0	.9	0.9	0.7
Lost workdays	14.3	17.2	17.6	27.3	24.1	32.9	–	–	–	–	–	–
Services												
Total cases	5.5	5.4	5.5	6.0	6.2	7.1	6.7	6.5	6.4	6.0	5.6	5.2
Lost workday cases	2.7	2.6	2.7	2.8	2.8	3.0	2.8	2.8	2.8	2.6	2.5	2.4
Lost workdays	45.8	47.7	51.2	56.4	60.0	68.6	–	–	–	–	–	–

[1] Data for 1989 and subsequent years are based on the *Standard Industrial Classification Manual*, 1987 Edition. For this reason, they are not strictly comparable with data for the years 1985–88, which were based on the *Standard Industrial Classification Manual*, 1972 Edition, 1977 Supplement.

[2] Beginning with the 1992 survey, the annual survey measures only nonfatal injuries and illnesses, while past surveys covered both fatal and nonfatal incidents. To better address fatalities, a basic element of workplace safety, BLS implemented the Census of Fatal Occupational Injuries.

[3] The incidence rates represent the number of injuries and illnesses or lost workdays per 100 full-time workers and were calculated as (N/EH) X 200,000, where:

N = number of injuries and illnesses or lost workdays;

EH = total hours worked by all employees during the calendar year; and

200,000 = base for 100 full-time equivalent workers (working 40 hours per week, 50 weeks per year).

[4] Beginning with the 1993 survey, lost workday estimates will not be generated. As of 1992, BLS began generating percent distributions and the median number of days away from work by industry and for groups of workers sustaining similar work disabilities.

[5] Excludes farms with fewer than 11 employees since 1976.

– Data not available.

47. Fatal occupational injuries by event or exposure, 1993–98

Event or exposure[1]	Fatalities			
	1993–97	1997[2]	1998	
	Average	Number	Number	Percent
Total	6,335	6,238	6,026	100
Transportation incidents	2,611	2,605	2,630	44
Highway incident	1,334	1,393	1,431	24
Collision between vehicles, mobile equipment	652	640	701	12
Moving in same direction	109	103	118	2
Moving in opposite directions, oncoming	234	230	271	4
Moving in intersection	132	142	142	2
Vehicle struck stationary object or equipment	249	282	306	5
Noncollision incident	360	387	373	6
Jackknifed or overturned—no collision	267	298	300	5
Nonhighway (farm, industrial premises) incident	388	377	384	6
Overturned	214	216	216	4
Aircraft	315	261	223	4
Worker struck by a vehicle	373	367	413	7
Water vehicle incident	106	109	112	2
Railway	83	93	60	1
Assaults and violent acts	1,241	1,111	960	16
Homicides	995	860	709	12
Shooting	810	708	569	9
Stabbing	75	73	61	1
Other, including bombing	110	79	79	1
Self-inflicted injuries	215	216	223	4
Contact with objects and equipment	1,005	1,035	941	16
Struck by object	573	579	517	9
Struck by falling object	369	384	317	5
Struck by flying object	65	54	58	1
Caught in or compressed by equipment or objects	290	320	266	4
Caught in running equipment or machinery	153	189	129	2
Caught in or crushed in collapsing materials	124	118	140	2
Falls	668	716	702	12
Fall to lower level	591	653	623	10
Fall from ladder	94	116	111	2
Fall from roof	139	154	156	3
Fall from scaffold, staging	83	87	97	2
Fall on same level	52	44	51	1
Exposure to harmful substances or environments	586	554	572	9
Contact with electric current	320	298	334	6
Contact with overhead power lines	128	138	153	3
Contact with temperature extremes	43	40	46	1
Exposure to caustic, noxious, or allergenic substances	120	123	104	2
Inhalation of substances	70	59	48	1
Oxygen deficiency	101	90	87	1
Drowning, submersion	80	72	75	1
Fires and explosions	199	196	205	3
Other events or exposures[3]	26	21	16	-

[1] Based on the 1992 BLS Occupational Injury and Illness Classification Structures.

[2] The BLS news release issued August 12, 1998, reported a total of 6,218 fatal work injuries for calendar year 1997. Since then, an additional 20 job-related fatalities were identified, bringing the total job-related fatality count for 1997 to 6,238.

[3] Includes the category "Bodily reaction and exertion."

NOTE: Totals for major categories may include subcategories not shown separately. Percentages may not add to totals because of rounding. Dash indicates less than 0.5 percent.

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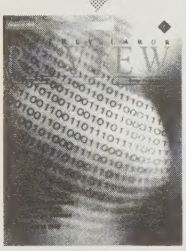

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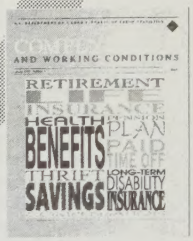

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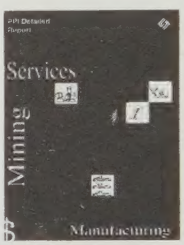

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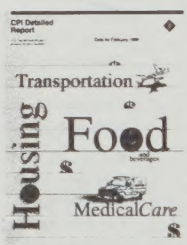

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Employment situation	May 5	April	June 2	May	July 7	June	1; 4–20
Productivity and costs	May 4	1st quarter	June 6	1st quarter			2; 39–42
U.S. Import and Export Price Indexes	May 11	April	June 8	May	July 13	June	34–38
Producer Price Indexes	May 12	April	June 9	May	July 14	June	2; 31–33
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